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# PENNSYLVANIA GAME NEWS

VOL. LX

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# PENNSYLVANIA GAME NEWS

JANUARY 1989

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## Dollars and Sense

JANUARY for GAME NEWS means annual report month. Every January since 1974 — and in various issues in previous years — the GAME NEWS has featured the Game Commission's annual report, a detailed financial accounting of where the agency's revenue comes from and what it's used for. Granted, like any financial statement, ours hardly makes for entertaining reading. But, again like most annual reports, it contains a wealth of information.

The Game Commission's annual report is written by the executive director, each bureau director and his division chiefs, and the comptroller. Basically, each account covers the responsibilities of each bureau, division by division, along with the highlights and accomplishments that transpired during the fiscal year.

The comptroller and his staff prepare the itemized financial tables. These show exactly where the agency's income comes from, license fees and timber sales, for example, and where the money is spent, from salaries and wages to pheasant feed and insurance.

A lot of effort is put into providing this annual report, and a lot of space — 20 pages this year — is devoted to it in the magazine. But it's worth it. GAME NEWS surveys have indicated more than a quarter million people read our annual report.

Judging by the questions and criticisms often raised, however, more people should study these published financial ledgers. Answers to questions about where our money comes from and how it's spent are clearly spelled out, along with the reasoning behind many of the agency's policies.

To get a good idea of just what the Game Commission is all about, go over this year's financial report. First, look at the pie charts. One illustrates the agency's major sources of income. Resident hunting license fees, for example, comprised 31.5 percent of the agency's income in fiscal year 1987-88. The other pie chart graphically shows, for the most part, how this revenue is apportioned among the agency's bureaus.

After looking at the pie charts, go to the tables, where income and expenditures are broken down in more detail. Using resident hunting license fees again as an example, it's shown that it's the adult resident hunting licenses that account for most of the income received in that category, and that senior, junior, and lifetime resident licenses comprise much less. Expenditures also are further itemized, from salaries and wages, which account for more than 40 percent of the agency's budget, right down to clinical services and medical supplies (materials for tranquilizing wild animals) which represent just a fraction of a percent of the budget.

The text portion includes annual statistics on employee complement, license sales by category, and land acquisitions, for example, along with current issues that were addressed during the year. A noteworthy highlight of this year's report is the reorganization of the Bureau of Game Management, which is now the Bureau of Wildlife Management. The bureau's many research activities and pheasant propagation practices are covered in much more detail than in previous years.

There's a great deal to be gleaned from this report. Everything is there, out in the open, made readily available to the public. Repeated independent audits have consistently shown the Game Commission to be a most cost efficient state agency. That's a fact in which the agency takes pride, and one we want more sportsmen to be aware of. If you've ever wondered where your license fees go, read this year's report. — *Bob Mitchell*





**DURING THAT** time I was able to savor the warm mellow days of October with geese on the wing, as well as endure the cold damp windblown grayness of the season.

## New Year's Doe

**By William R. McClintic**

**O**F ALL the simple truths and quotables I've heard about hunting, one above all hits closest to home for me: "The more you hunt, the more you want to hunt." There is never enough time through the months of October, November and December. I'm sure most GAME NEWS readers have suffered painful yearnings to escape the confines of factory or office on beautiful fall days for the woodlands. No doubt, too, you've had the toothache of guilt groaning along somewhere in your subconscious as you desert home and family for the solitude and camaraderie of the hunt. It all seems to come with the turf. But for one season, for me, the pressure was off.

My wife had broken her foot about five days before the opening of archery season (honest, it wasn't a booby trap) and as a result, for two months her early morning six-mile runs came to a

screeching halt. Mornings had always been our biggest time crunch. As any of you with children know, getting them organized and ready to blast off into another day is demanding in itself, especially when there are three under seven years of age. Normally we take turns manning the fort, but the "year of the broken foot," as we've come to call it, my wife graciously encouraged me to seize the opportunity and hunt each morning to my heart's content. And so I did, but without success.

### Great Fortune

Countless mornings I greeted the sun while up in a tree stand somewhere on our farm. It is my great fortune to live in an area where hunting is prime right outside my door. With the help of a couple tried and true hunting buddies, an array of permanent tree stands have been erected around the farm. So

squeezing in a hunt at dawn is not all that complicated once the inertia of staying in a warm bed has been overcome. And over that season, I rarely missed a morning. During that time I was able to savor the warm mellow days of October with geese on the wing, as well as endure the cold damp wind-blown grayness of the season. As usually happens as the season wears on, I abandoned the permanent stands in favor of either my little homemade portable stand, or a recently purchased Kama-kazi climbing stand. These allow me to hunt the scrapes and buck sign that usually start to appear just as bow season draws to a close.

I was nearly certain I had a lock on an impressive, thick necked eight-point when his movements started to follow a pattern. I picked out a tree for the climber just below a fresh line of scrapes and even tested out the best elevation for the ambush. It turned out to be about 25 feet up (almost heaven) but it afforded me three good shooting lanes. To gild the lily that following morning, I dropped some "doe in heat" urine along the runway above and below the stand, while using fox urine on my boots for cover scent.

Evidently, my buck friend smelled a rat. As hoped for at first light, I heard and then saw him moving along the path upwind from me. But instead of following nose to ground, and grunting right to me, he promptly turned and walked the other way. The best laid plans of mice and men. And so ended early archery season.

Despite my passion for bowhunting there's no equal for the excitement and fellowship of rifle season. My wife and two younger kids depart to visit Grandma right after Thanksgiving, leaving me and Ben, my oldest, soon to be joined by five good hearted and true friends who migrate up from Bucks County. For a magical few days our house becomes our deer camp. Having been used to much more primitive camps in years past, the hunters refer to it as the "Bradford Hilton." While they speak fondly of bygone times when we

slept in little trailers or, worse yet, on picnic tables in a snowstorm, none seem anxious to give up all the amenities and comforts we now enjoy at day's end.

One hunter, "Pamp," is 84 and still cruises the woods and fields from sunup to sundown, carrying the same Winchester 32 Special and wearing—in addition to his new fluorescent orange—the same red and black Woolrich outfit he's worn for the last 60 seasons. Around the table at night, after the day's successes or blunders have been thoroughly told, Pamp tells us tales of his younger days "huntin in Potter." And although the stories have been told many times before, they never lose their fascination. He usually precedes us to the sack (although not by much) but rolls out in good time the next morning to be sure there's potatoes enough ready for breakfast. No day can pass without eating potatoes. And who's going to argue diet with a guy who's still hunting at 84?

broken foot" was memorable and too short. But somehow, my fairly long string of harvesting bucks was broken. I never saw a set of antlers. The doe were everywhere, but the antlered whitetails just never appeared. Two of our group filled out their tags, for which I was glad because they're all dedicated and responsible sportsmen. In many ways, not being among the roster of fellows who had scored was good in that it made me realize more than ever that it was the hunt and not just the climax that I find so absorbing. And yet I couldn't help feeling a twinge of disappointment.

Late archery season had always seemed foreign to me. In fact, I'd previously regarded it as being only for masochists, but this year it took on a whole new meaning. This time around it was like a coach saying, "kid, you messed up but I'll give you one more chance." So all through doe and muzzleloader seasons I scouted and schemed. When the time came, I knew my stand.

New Year's Day was gray and barren without a flake of tracking snow even in the woods. But then again, it wasn't the freezing raw cold I had anticipated. By



this time my wife had written me off as an incurable obsessive neurotic and only shook her head as I trudged up the hill, bow in hand, determined to make that afternoon “the one.” It was.

I was afraid the deer wouldn’t make it to my stand before the light faded. I’d heard them moseying through the thick scrub woods for a good ten minutes before seeing them. There were no less than a dozen. I had given up looking for a rack, knowing that many might have been shed by this late date. So when a good size deer stepped broadside into the shooting lane, I let the arrow go. I was certain it was a good hit and yet disturbingly, the deer turned abruptly and ran up hill over the top of a bench just above my stand. I resisted the temptation to go look after a short interval and, instead, hustled back down to the house for a bigger flashlight.

Now practicing medicine in a rural county like Bradford sure has its advantages, such as premium hunting out your backdoor, but not having an abundance of other doctors around can make night calls quite demanding. I was no sooner in the door when the phone rang, and I felt obliged to drop everything to go see an elderly, bedridden patient who had taken a turn for the worse. Contrary to popular sarcasm, we do still make house calls. So, still in full camouflage, I grabbed my bag and in the company of Jed, my always eager five-year-old, drove off to the nearby farm. On the way there my heart sank as the radio weather man announced a winter storm watch predicting 6 to 12 inches of snow by morning. I envisioned the blood trail disappearing and the carcass being buried until spring.

We made our visit brief. Fortunately, the man was not too ill and didn’t require being hospitalized. Jed was excited to render assistance in the urgent

search for the deer, so despite it already being past his bed time, he stayed with me and together we bounced across the hayfield up to the wood’s edge where I’d taken the shot. Already some fat lazy flakes were drifting across the headlight beams and the temperature had dropped noticeably. I was really getting worried that the deer would not be found.

On hands and knees we scoured the spot where I was virtually certain the deer had stood, yet not a drop of blood or a strand of hair materialized. I even positioned a powerful flashlight up in the tree stand so its beam traced the path of the arrow and still could find nothing. Just as I was beginning to have doubts whether I’d even connected at all, Jed called out, “Hey Dad, look at this.” The little bugger had found where the blood trail opened up. From that point on, our progress was steady although it was slowed by the accumulating snow. At one point the trail seemed to dry up until a second time my trusty bloodhound Jed came up with the trail again.

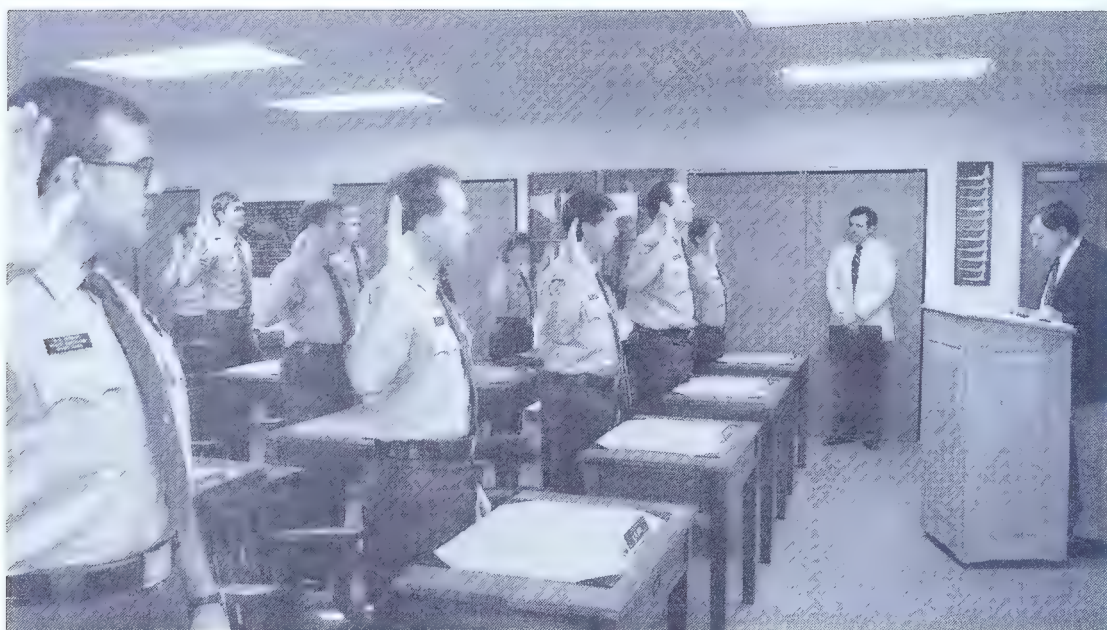
### Finally

Finally, around 9 p.m., with an inch of snow already laying, we came on the deer about 150 yards from where the blood trail had begun. I’m not sure who was more elated, me or my boy, but we hooted and hollered and slapped high fives about ten times. It was a good size mature doe. The arrow had impacted high in the chest, just behind the right shoulder, and for some reason had not exited the opposite side, apparently accounting for the relatively sparse bleeding. But there she was, the culmination of a *long* hunt. And this success was all the sweeter by being able to share it with my little guy. I dare say it’s a New Year’s doe neither of us will ever forget.

## Thoughts While Walking

*Every mile is two in winter.*

—George Herbert



**PETE DUNCAN** delivers the "Oath of Office" to the 20th Class of Wildlife Conservation Officer Trainees. The group represents the first class to attend the Ross Leffler School of Conservation since it was moved from Brockway to Harrisburg.

## Pennsylvania Game Commission Annual Report

July 1, 1987—June 30, 1988

### EXECUTIVE OFFICE

**Peter S. Duncan**  
Executive Director

This fiscal year saw the completion of the Harrisburg headquarters complex, with the actual move taking place October 13 through 16, 1987. Open house for the public was held November 14 and 15 with nearly 3000 people visiting the site. The formal dedication, held on November 16, 1987, was attended by many prominent sportsmen and legislators who were instrumental in steering this project to a successful conclusion.

Once again, the public is always welcome at our new facility. We will continue to plant trees and shrubs to demonstrate the best techniques for habitat improvement. A food strip with the planting mixture available to our cooperators is planted along our nature trail, along with many other plants beneficial to wildlife. Over time we will expand the trail system to provide an enjoyable and educational experience for those who come and visit the facility.

The installation of 29 men and women in the Ross Leffler School of Conservation at Harrisburg was the highlight of the June 1988 Commission meeting. The trainees will experience a rigorous training schedule, culminating in graduation in early 1989. This class will bring our field force to full complement.

The Commission welcomes two new Commissioners. Mr. Edward L. Vogue, Jr., from Dupont, was appointed to replace Mr. Elmer Rinehart in the northeastern section of the state; and Mr. Edson S. Crafts, III, Huntingdon, was appointed to replace Mr. Paul Hickes in the southcentral area.

As the end of this decade approaches, we are proud of the accomplishments the Commission has achieved by working together with the sportsmen in the commonwealth to ensure that we are properly managing wildlife resources and protecting our sporting heritage for future generations. With the continued loss of habitat, along with pollutants that daily assail our environment, we will need to be more vigilant and renew our commitment both as an agency and as concerned conservationists.



## BUREAU OF ADMINISTRATIVE SERVICES

**Kenneth L. Hess**

**Director**

This bureau encompasses the Personnel Services (Personnel, Training, Labor Relations, Library), Hunting License, Automotive and Procurement, and Office Services Divisions, plus the Ross Leffler School of Conservation.

### Personnel Services Division

The Personnel Services Division develops, coordinates and directs all statewide personnel management programs and activities in the following major areas: work force analysis and planning; recruitment, selection and placement; classification and pay, benefits, transactions, employee development, retirement counseling, affirmative action, labor relations and training, as well as managing the agency's central office library.

There are literally thousands of transactions accomplished for approximately 700 permanent and 75 seasonal employees each year. This Division administers the labor relations activities, including negotiations, management training, and contract administration for approximately 11 different employee agreements.

In addition to training the 20th Class of Wildlife Conservation Officers, of which approximately 1200 people applied for 30 positions, this Division has ongoing in-service and out-service training programs for all levels of employees.

This Division operates the library for not only Commission employees, but also the general public. The library contains scientific, technical and general reading material, most of which is related to wildlife management.

This Division also ensures equal opportunity by having in place a formal comprehensive Affirmative Action Program, and is constantly involved in all aspects of every Game Commission employee's career, either directly or indirectly, from hiring to retiring.

### Hunting License Division

This division appoints and supervises approximately 1100 issuing agents comprised of county treasurers and private businesses. Monthly reports are received and audited with accompanying revenue (\$23,745,356) deposited into the Game Fund. The License Division oversees these agents to ensure compliance with Game Commission regulations and policies.

The Harrisburg License Division also issues licenses by mail.

**BARRY WARNER, former Juniata County WCO and Special Operations Division Chief, was named Northeast Region Supervisor. He replaced J.R. Fagan, who became the Director of the Bureau of Law Enforcement.**

Selected agencies at key locations in Ohio and New Jersey have been appointed and continue to serve our nonresident hunters.

The following licenses were issued for the 1987 license year.

1987-1988\*

Adult Resident	917,489
Junior Resident	116,888
Senior Resident	64,409
Nonresident Adult	66,179
Nonresident Junior	2,468
Nonresident 5-Day	2,593
Archery	254,770
Muzzleloading	78,862
Antlerless Deer	558,697
Three-Day Regulated Shooting	
Grounds	2,485
Adult Resident Furtaker	36,778
Junior Resident Furtaker	6,294
Senior Resident Furtaker	2,756
Nonresident Adult Furtaker	356
Nonresident Junior Furtaker	8
Resident Bear	90,393
Nonresident Bear	1,658
Senior Lifetime	1,481
Senior Lifetime Furtaker	67

\* Sales through June 30, 1988

### Automotive and Procurement Division

Major responsibilities are: administration and coordination of agency procurement activities; automotive fleet management; risk and management insurance programs; operations and maintenance of Advancement Account for vendor payments under \$1500; surplus property activities; and the Contract Compliance program.



## Office Services Division

This division is responsible for the ordering, stocking and distribution of all office supplies, paper supplies and commonwealth forms used by the Harrisburg office, six regional offices, five game farms, Howard Nursery, and the Ross Leffler School of Conservation. All Harrisburg duplicating requests are processed through this office, which also compiles statistics for the annual updating of the Data Book. All incoming mail is sorted and distributed by this division. The processing of all outgoing mail to regional offices, field personnel, news media, license issuing agents, sportsmen's clubs and the general public, as well as the maintenance of the mailing lists, is handled here. Messenger service, warehouse storage and distribution are maintained by this division.

## BUREAU OF INFORMATION AND EDUCATION Lantz A. Hoffman Director

1987-88 will be long remembered as a time filled with excitement and achievement; a time when, after years of planning and development, we finally occupied our new state headquarters and training facility just north of Harrisburg. We shared anxious anticipation with other colleagues and spent the early months of the fiscal year preparing for the "Big Move." At the old leased building in Rutherford, we methodically packed equipment and carefully labeled hundreds of boxes so their contents could later be easily identified.

Simultaneously, over at the new building, we were anxiously installing and testing some modern equipment. Bureau personnel helped design and install a sophisticated new video distribution system; an audio-visual production studio; photographic processing laboratories; and modern radio controlled projection and sound equipment in the new theater-auditorium.

Then, in October, the "Big Move" actually began. For almost two weeks a steady convoy of trucks traveled back and forth from Rutherford and our old Pike Street warehouse to the new headquarters complex in Susquehanna Township. Longtime Commission employees, who eight years earlier moved from the old Capitol South Office Building to Rutherford, marveled at how much we had accumulated in such a short time.

For a while it seemed like the job would never get done, but it did. Rutherford was behind us. In slightly over a month, everything would be unpacked, put in place, and the new headquarters readied for a three-day open-house and dedication celebration.

Valuable wildlife paintings, some by the late Ned Smith, were taken from storage and prominently exhibited where visitors can see and enjoy them. These are the original paintings commissioned as part of the Working Together for

Wildlife and Waterfowl Management Stamp programs. They remain on permanent display in the headquarters lobby.

A search through Commission archives and files, together with items gathered from former employees and their families, resulted in an interesting exhibit of old photographs and other memorabilia depicting the early years of the agency's long and proud 90-year history.

Headquarters visitors were also treated to a display of museum quality wildlife mounts on temporary loan from several licensed state taxidermists.

Snow in mid-November isn't exactly rare in Harrisburg—just a bit unusual. A few days prior to the dedication, however, nine inches lay on the speaker's platform, and icicles four feet long dangled from the roof. Dedication planners felt the weather might force the ceremonies inside, but the snow and ice went as quickly as it came, and the open-house dedication weekend was a resounding success. On that beautiful fall weekend, some three thousand persons came to Harrisburg and toured "their" new headquarters.

Speeches and formal dedicatory remarks aside, few in attendance could argue that the highlight of 1987-88 was that moment when, with the playing of the National Anthem, the American, Pennsylvania and Game Commission flags were raised for the first time over our long awaited headquarters and training school.

Bureau personnel were humbled, yet pleased, that we had been selected to help arrange and orchestrate that great moment in Game Commission history. All who attended said it was a day that would not soon be forgotten.

## Public Information Division

We are encouraged by ever increasing public appreciation of our states' wildlife and their concern for its well-being. Frequent and ongoing television series such as *Nature*, *NOVA*, *Outdoor Pennsylvania*, and *Call of the Outdoors*, along with increasing numbers of outdoor columns in newspapers and magazines, have made people more keenly aware of Pennsylvania's wildlife and other invaluable natural resources. This mounting interest, however, continues to trigger increased demands on the agency's under staffed Public Information Division.

To satisfy their reader and viewer interests, outdoor writers and television producers require of the Public Information Division more detailed data, more current information, more graphic materials and illustrations, more in-depth news releases and more wildlife feature articles.

Pennsylvania's outdoor communicators, more numerous and active than in any other state, continue to rely heavily on background research gathered by the division. And although wildlife information seems to be reaching far wider reading, viewing and listening



**TODAY'S Hunter-Trapper Education students are exposed to not just shooting safety, but also wildlife laws, sportsmanship, first aid and a host of other subjects. Nearly all of this training is provided by volunteer instructors.**

audiences, it's becoming increasingly difficult for the division to satisfy constituent demands for information and material.

In reality, the more people learn about wildlife and wildlife management initiatives, the more they want to know. They also demand increased input into wildlife management decisions and that, alone, prompts hundreds of inquiries.

We recall that just a decade ago, agency proposals oftentimes resulted in no public feedback whatsoever. Today, conversely, a proposal may generate literally hundreds of letters and phone calls—each deserving a timely, correct and complete response. A case in point is the new Bonus Deer Program, simple in objectives and design, but with complex options that required detailed explanations and greatly increased activity by agency personnel.

Educational efforts aimed at promoting greater understanding and acceptance of the new deer management initiatives are ongoing. Field officers and I & E personnel have generated an awareness of the problems Pennsylvania faces with an ever increasing deer herd and the inability of hunters to gain access to those areas where deer are causing extensive damage to agriculture, silvaculture and residential properties.

Experiments, pilot projects and trial runs must be evaluated and reported regularly, so sportsmen can help measure the effectiveness of the Commission's new approaches to wildlife management. Equally important are explanations lending better understanding of limitations inherent in new management initiatives. Program expectations are not always realized, and acceptance of program failures or shortcomings cannot be achieved without an ongoing informational approach.

Like other Game Commission divisions, we, too, are faced with continuing fiscal restraint and inadequate staffing to handle an increasing workload. It appears evident the minimal resources of the Public Information Division will continue to be strained, as we struggle to meet the appetite of those who are eager to know more and more about wildlife, and those who demand to have a voice in the agency's wildlife management programs.

### **Hunter-Trapper Education Division**

A new and more comprehensive student manual was phased into the hunter-trapper education curriculum during the past year. The larger, 8 x 11 format accommodates many additional graphics which, in turn, reinforce the text material. The new and significantly better training manual is written at the 12-year-old reading



comprehension level, for it is that age group which comprises the majority of students attending courses throughout the state.

The Hunter-Trapper Education Division assisted noted film maker Alan Madison with development of a new production entitled *The Measure of the Hunt—A Guide To Responsible Hunting*. Much of it photographed in south-central Pennsylvania, using Game Commission personnel, the film will be used throughout North America.

The Commission hosted the National Rifle Association's fourth annual North American Hunter Education Championship, held at Fort Indiantown Gap. The competition consisted of six events designed to test participant's skills in simulated hunting situations. Approximately 120 youngsters, from eleven states and Canada—all hunter education program graduates—participated in the three-day event. The top senior division team (15- to 18-year-olds) hailed from Albion, Erie County. The winning junior team (14 and under) represented the state of Virginia. Pennsylvania's junior team, from Troy, placed third in the overall competition. A majority of the operational staff was made up of volunteer Pennsylvania hunter-trapper education instructors and Game Commission personnel.

### **GAME NEWS and Paid Publications Division**

GAME NEWS is the official publication of the Pennsylvania Game Commission and, therefore, the primary voice of the agency. Over the past year, it continued to be the most widely read outdoor publication in the state, with an average monthly circulation well in excess of 150,000.

Approximately 20,000 copies per month go to Farm-Game cooperators and 9000 to Safety Zone cooperators, in return for which these landowners permit public hunting on their farms. Over 6000 copies are donated to school libraries to help students become familiar with



wildlife and its management, conservation, and the roles of hunting and furtaking in properly controlling the populations of certain species. Most GAME NEWS subscribers live in Pennsylvania, but over 21,000 magazines go to other states and several dozen foreign countries. Beginning with the October 1988 issue, subscription prices were increased approximately 50 percent to meet the rises in production costs which resulted when our longtime printer went out of business.

The primary objective of GAME NEWS always has been to provide sportsmen information on the numerous programs carried out by the Game Commission. This is done through articles by wildlife biologists and other Commission personnel. Related but unofficial material includes freelance stories and articles which give first-person accounts of all outdoor activities available in Pennsylvania except fishing and boating. Regular columns by popular writers provide information on areas of interest to sportsmen.

Other popular paid publications are produced by this division. New during the past year was a 216-page hard cover book, *Pennsylvania Big Game Records, 1965-1986*, which combines all data accumulated during the Game Commission's nine deer and bear scoring programs. It also includes dozens of stories describing these trophy hunts and hundreds of photos. The first printing quickly sold out, and an enlarged edition is in preparation. Another printing of Ned Smith's ever popular *Gone for the Day* is now in production, as are new printings of Jim and Lillian Wakely's *Birds of Pennsylvania* and the *Pennsylvania Game Cookbook*. Chuck Fergus's *The Wingless Crow*, a collection of his Thornapples columns, is also available, as is *Mammals of Pennsylvania*.

This is probably as good a time as any to mention that we have another big hard cover book in production. Don Lewis, our longtime gun columnist, has been hard at work for months, and is currently coming down the homestretch on a 180,000-word manuscript dealing with all phases of guns and shooting of interest to Pennsylvania hunters. We can't give a definite publication date, but chances are it will be in the spring of '89. We're sure you'll like it.

Project WILD continues to be enthusiastically received by Pennsylvania educators who attend workshops offered by trained volunteer facilitators. Project WILD offers something of value to educators in all disciplines and at every grade level. Over 3500 educators have participated in workshops to date.

The Commission has presented over 100 nontoxic shot programs throughout the state to help waterfowlers make the conversion from lead to steel shot. Division personnel received advanced training in nontoxic shot education efforts at a seminar conducted at Winchester's Nilo Farm by the Cooperative Lead Poisoning Control Information Program.

The 1988 major exhibit featured information on the Commission's deer management program. It was viewed by over one million people at the State Farm Show, Eastern Sports and Outdoor Show and the Bloomsburg Fair. The theme for 1989's major exhibit is "Volunteers for Wildlife," and is designed to recognize the invaluable assistance provided by thousands of volunteers "Working Together for Wildlife." Additionally, extensive exhibit renovations have begun at the Pymatuning Wildlife Management Area Visitor Center to better explain the area's outstanding wildlife resources.

The Division continues to be involved with educating our youth about Pennsylvania's wildlife through teacher in-service programs, county and state conservation leadership schools, county and state Envir-O-Thon competitions, county and state FFA wildlife contests, participation in the FFA Wildlife Conservation Project program, Boy Scout and Girl Scout activities, and youth shooting programs. It also annually organizes the Middle Creek Wildlife lecture series, Middle Creek Art Show and Ned Smith Memorial Art Seminar.

This past spring the Commission hosted two training sessions for individuals wanting to be certified Boone and Crockett Club scorers. Thirty-eight people successfully completed the hands-on four-day training program. Pennsylvania now has 41 official Boone and Crockett measurers, more than any other state in the nation.

Working Together for Wildlife—Entries were received from Pennsylvania artists for the 1989 Working Together for Wildlife fine art competition. The white-tailed deer is the subject for the 1989 program, and the winning design is featured on this month's cover. Proceeds from the sale of the fine art prints and patches, and those from seedling packets sold through the Planting for Wildlife program, provide additional revenues to manage protected wildlife in the commonwealth.

Waterfowl Management Stamp and Print Program—John Heidersbach, from Cedar Falls, Iowa, won the 1988 Pennsylvania Waterfowl Management Stamp Design Contest with a pair of flying woodducks. His painting was selected from 63 entries submitted by wildlife



artists from 17 states. Proceeds from the sale of Pennsylvania "duck" stamps and prints are used to purchase and improve wetlands, and for waterfowl education programs in the state. Unfortunately, support of our voluntary "duck" stamp has been poor.

## BUREAU OF LAND MANAGEMENT

### Jacob I. Sitlinger

Director

With today's environmental problems being so widespread and complex, it's with great care and responsibility that the bureau administers our many land management activities.

With the knowledge that our land and water resources are diminishing, major efforts continue to provide for their preservation for future generations. Many times, however, problems exist when environmental preservation practices are instituted. Laws and regulations promulgated for the protection of these resources come under constant attack by various groups and individuals in an attempt to rob them of their strength.

Additionally, through the 1985 Food Security Act, many avenues were opened to the conservation community, providing incentives for them to set lands aside to protect the resource from erosion, conversion, and also destruction. Here, reports indicate, one can readily see that, for a small complement of people, major strides are being taken in order to protect these valuable resources for all segments of our population to use and enjoy now and in the future.

## Engineering and Contract Management Division

This Division is responsible for planning, designing, specifying, contracting for and inspecting all contracted maintenance work and new construction. In addition, the division provides technical assistance on problems involving general engineering and prepares feasibility reports and cost estimates for a variety of proposed projects.

This past fiscal year, ten repair and maintenance contracts were awarded to preserve and enhance structures on State Game Lands. Work requests were submitted to the Department of General Services for additional projects in excess of the \$25,000 limit. The MARSH, a Ducks Unlimited cost sharing program, project design for SGL 214 was completed in-house and submitted to the Department of General Services for review and subsequent bidding; design work is continuing on another MARSH project for SGL 282.

Impoundments were visually inspected and

**LAND MANAGEMENT** Director Jacob Sitlinger studies a map of one of the agency's new acquisitions. During the fiscal year, 10,675 acres were added to the State Game Lands network.

formal inspection reports were submitted to the Department of Environmental Resources.

Assistance was provided to the Bureau during the final construction phases of the Harrisburg headquarters office, as well as the Pennsylvania Conservation Corps (PCC) projects to construct landscape structures and a grounds maintenance building.

## Federal Aid and Public Access Division

The Federal Aid in Wildlife Restoration Act, commonly called the Pittman-Robertson Act, has continued to serve wildlife well by providing reliable funding for the improvement, rehabilitation and restoration of wildlife habitat. The funds for this program are derived from federal excise taxes on sporting arms, ammunition, and archery equipment. The funds are apportioned to states based upon a ratio combining land area, license sales, and total population. Pennsylvania is fortunate to receive the third highest total of this funding nationally; only Texas and Alaska receive larger totals. Upon approval of project documentation, the Commission expends Game Fund dollars and then requests reimbursement at a 75 percent level from the U.S. Fish and Wildlife Service which administers the P-R program. The Game Commission's reimbursements during the 1987-88 fiscal year totaled \$4,330,578. This funding allows for continued maintenance of many projects on State Game Lands.

The Endangered Species Act allows us to be reimbursed for 90 percent of our expenditures on approved Endangered Species Projects. We received \$60,600 during the past fiscal year from the program, which also was supported by a private grant.

## Public Access Program

The Game Commission's public access programs continue to provide an increase of hunter access to private lands. The oldest, the Cooperative Farm Game Program, begun in 1936, has 184 projects in 58 counties. Through it, 20,922 cooperating landowners keep over





2,433,476 acres open to hunting. We also now have 8891 cooperators, covering over 1,448,945 acres, in our Safety Zone Program, and another 583,974 acres are enrolled in our Forest Game Program. Many recreational opportunities were enjoyed by sportsmen on those lands.

These programs do not give sportsmen unlimited access to these private lands. Hunters should still contact cooperating landowners for permission and, out of courtesy, just to let them know who is on their properties.

The Commission continued to provide 10-pound mixed seed packets to landowners interested in devoting a little space for wildlife. The seed mixture of dwarf sorghum, millet, buckwheat and sunflower provides a good source of food for all wildlife and, if properly located on the farm, can provide relief from depredation upon field crops. This seed mixture will continue to be provided free of charge to cooperators and offered for sale to the public.

### Federal-State Coordination Division

The Game Commission has formal Memorandums of Understanding and Cooperative Agreements with other state and federal agencies to ensure that any projects or actions proposed by these agencies, on lands they administer, conform to the best management practices for the protection and enhancement of wildlife. The Commission has recently finalized formal Cooperative Agreements with the U.S. Department of Defense for conservation and management of wildlife resources at three military reservations, which total 2365 acres, located in the commonwealth. These agreements provide for a cooperative endeavor in preparing long-range management plans, developing and enhancing wildlife habitat, and protecting and preserving the wildlife resource located within these areas.

The Pennsylvania National Guard utilized State Game Lands for training purposes during their annual two-week training period. The 876th Engineer Battalion completed projects on four State Game Lands that embraced such diverse activities as bridge construction, road grading, placement of vehicle barriers and construction of herbaceous openings. Additionally, the Guard furnishes invaluable assistance to the agency on a yearly basis by providing air support for the winter bald eagle census.

### Game Land Planning & Development Division

During the past fiscal year 1362 acres of herbaceous openings were planted to small grain and grass legume combinations by Food and Cover Corps personnel. All planted grain was left standing for wildlife. An additional 13,814 acres were maintained by mowing. Other treatments included liming 1240 acres and the application of fertilizer on 1901 acres. Winter cuttings of woodland borders totaled 931 acres, and 12,345 fruit producing trees were pruned.

New construction included 2 miles of road, 7 parking areas, 640 nesting structures, and 1024 bird houses. Maintenance included 2475 miles of roads, 7807 parking areas, and 1687 miles of boundary lines. Sharecropping activity on Game Lands continues to play an important role in wildlife management. We received 11,896 bushels of ear corn and 18,126 bushels of shelled corn from sharecroppers. This was in addition to the amount of grain left standing by sharecroppers for use by wildlife.

### Forestry Division

There were 10,885 acres of State Game Lands designated to receive wildlife habitat improvement treatment through commercial and non-commercial forest management practices during the fiscal year. An additional 850 acres received treatment by spraying to remove ferns which were impeding the development of forest regeneration.

Commercial sales on 10,336 acres returned \$4,804,131 to the Game Fund, which is an increase of \$545,423 over the previous year's receipts. The average return was \$464 per acre, an increase of \$9 per acre. Local economies were supplied with more than 32 million board feet of logs for lumber and 215,876 tons of pulpwood during the year; while Pennsylvania's outdoorsmen and wildlife benefit from the lumberman's activities on State Game Lands.

A road network sufficient to carry the heavy logging equipment, and comply with the Clean Streams Law, rules and regulations, was supervised by the contract officers-in-charge. The contractors for the 87 timber sale contracts improved 13.2 miles of haul roads, installed 14.9 miles of new roads—which became food strips after seeding—and placed 210 culverts at an estimate cost to them of \$96,705.

### Real Estate Division

During the past fiscal year, 10,675 acres, in 22 counties, were added to the State Game Lands network.

The total of all miscellaneous operational facility lands, such as the Game Farms, remains at 3226 acres, purchased at a cost of \$314,046.

An additional 18,851 acres were purchased with Project 70 funds during the years 1965 to 1980. The total area of all Game Commission holdings is now 1,317,055 acres, in 279 separate tracts, in 65 counties.

Our four survey crews perform boundary line surveys for all land acquired by the Commission. They also survey disputed boundary lines and provide topographical surveys. The work of our real estate specialists, draftsmen, abstractor and legal counsel provides assistance in pursuing an aggressive land acquisition program.

### Payments in Lieu of Taxes

Local governmental bodies received 60 cents per acre in-lieu of taxes, as required by



Act 20 of 1929. During the past fiscal year, \$788,853.90 was divided in proportional payments to the county, school district and township where such lands are located.

### Environmental Impact Assessment and Minerals Division

The primary objective of the Environmental Impact Assessment Division is to prevent unnecessary and avoidable wildlife habitat losses from man induced changes in the natural landscape. Large scale construction projects that require federal or state permits, use public funds, or result from a major federal program are subject to review for adherence to environmental protection standards. On site surveys and field studies are conducted by agency personnel during project planning stages to determine the impacts these projects will have on wildlife habitat and wildlife populations. Study results are detailed in formal reports which are used as a basis for recommending (1) altering the project location, (2) modifying its design, or (3) withholding approval for construction until all environmental protection requirements are met.

Within the past year the Commission review efforts have included 47 major highway construction projects, 4 airport expansion proposals, 11 proposals for interstate pipeline construction and 3 proposed hydroelectric impoundments. Applications to fill or modify 46 wetlands for commercial or private land development were also reviewed.

These efforts have resulted in the preservation of many unique habitat areas, including black bear refuge swamps, wintering and nesting areas for game and nongame birds and mammals, and valuable stream-side and wetland habitat essential to the continued existence of endangered and threatened Pennsylvania wildlife.

Another 580 applications for coal surface mine projects and solid waste disposal areas were also reviewed and commented on. The Department of Environmental Resources cooperates in these reviews to ensure wildlife protection requirements of the mining and waste disposal regulations are met. These applications represent over 38,000 acres of land disturbance which must be reclaimed to their pre-mining condition or better.

### Mineral Section

The recovery of oil, natural gas and coal are major industries in the commonwealth. Land ownership across the state, including many acres of Game Lands, are subject to mineral and mining rights owned by private individuals

and businesses. The mineral section is responsible for ensuring that private mineral recovery efforts on Game Lands are conducted with a minimum of habitat disturbance and reclaimed to their premining habitat values. The Commission also leases its mineral rights according to an established policy which includes reining and reclamation of sites abandoned prior to Commission ownership. In some cases coal rights are exchanged for valuable lands which are added to the Game Lands system. Oil and gas leases are also awarded according to strict environmental protection standards. On Game Lands, 68,500 acres are currently leased for oil and gas production. Fiscal year revenues from all mineral recovery projects on Game Lands totaled \$1,076,120.

### Howard Nursery

The Howard Nursery provided 4,357,365 tree and shrub seedlings for wildlife habitat improvements on State Game Lands and other public and private lands open to public hunting. The Planting for Wildlife Program continues to be popular. In this fiscal year 129,000 tree and shrub seedlings were sold to persons interested in providing food and cover for wildlife.

The nursery is growing 37 species of tree and shrub seedlings, including many native food producing varieties.

The wood shop, which continues to be an important part of the nursery, is where all the wooden information signs used on State Game Lands and public access properties are manufactured.

### BUREAU OF MANAGEMENT INFORMATION SYSTEMS

Lyle M. Koons, Jr.

Director

This year the Bureau continued to provide uninterrupted service despite a difficult and rapidly changing work environment.

In preparation for the move to our new headquarters building, we tested and certified internal communications lines to 154 work locations



**MODERN machinery plays an increasingly important role in many habitat management activities with each passing year. Such machines enable the agency to accomplish in hours what used to take days or weeks.**



in the new building. We moved our large computer system on October 13, 1987 and were in full operation the next day. We installed an alarm monitoring system in the computer room to help us protect the equipment and provide security.

For the Bureau of Wildlife Management we changed the deer management computer programs to accommodate bonus deer statewide in any antlerless season; provided for historical information on black bear harvests and capture records, as well as possible alternate management units; and installed microcomputers for the Bureau's use.

**FROM wildlife management and law enforcement to budgets and payrolls, even the GAME NEWS subscription list, the agency's computer system has become an integral part of nearly every agency function.**



For the Bureau of Administrative Services we changed 16 computer programs to handle accounting for senior lifetime licenses, and installed two microcomputers.

As the new GAME NEWS printing contractor could not accommodate our previous address label formats, we changed two computer programs to accommodate the new formats.

A complete overhaul of the agency's cost coding system and organization numbers required that we change 53 existing programs and implement 18 new ones. This effort will provide us with better program activity information.

The budget was also placed on the main computer to improve yearly preparation and ongoing management. This project will relate directly to program activity monitoring.

A capital assets project team was formed to redesign the entire asset management system. One subsystem has been investigated and developed, and many more will follow. This redesign will be given a high priority over the next 18 months.

A computerized advance account system was installed on regional office and Harrisburg

microcomputers to speed processing and improve accountability for payment of local invoices.

A total of eight new microcomputers were installed at the headquarters. These machines have provided managers with the necessary tools to quickly process many administrative functions and improve the working environment in general.

Training agency personnel to use microcomputers and new large computer applications is an ongoing process. The MIS Bureau provides this training on an as needed basis.

We accomplished these changes while maintaining an electronic file of 2,547,000 records, and we processed 1,241,000 transactions to keep those records up to date. We now have an active library consisting of 360 computer programs.

We changed many programs in our inventory to work properly with our existing communications handler, updated our disaster recovery agreement, produced a multi-year automated technology plan, trained bureau personnel on specific software products, attended appropriate conferences and seminars, and responded to various audits and recommendations.

We look forward to providing more and better service to the agency, so the Pennsylvania Game Commission can more effectively manage the resources we are charged to protect.

**BUREAU OF LAW ENFORCEMENT**  
**J. R. Fagan**  
Director

### Administration

The modernized Game and Wildlife Code has been in effect for over a year and the implementation of the escalated penalty structure has shown some varied results. It appears the field officers have continued to use very good judgement in enforcing the new code. The first year, 59 percent of the people contacted concerning infractions were issued warnings, not formally charged. To point out this fact, during fiscal 1987, 12,831 warnings were issued versus 8853 arrests. During the year, 52 percent of all arrests were handled by the filing of citations rather than through the use of the Field Acknowledgment of Guilt. Our officers continue to show their professionalism in handling cases through the court system. Of the 4585 cases processed through the judicial system, a 90 percent success rate was achieved.

Some of the more common violations of the Game and Wildlife Code are: failure to wear fluorescent orange, hunting without proper licenses, driving on cleared fields, hunting and shooting in Safety Zones, possessing loaded firearms in vehicles, failure to tag big game, spotlighting, hunting over bait, unlawful possession of game and wildlife, late hunting and using a vehicle to hunt.

### Permits

The Technical Services Division, along with



the regional office staff and field officers, processed more than 4000 permits, which are authorized by law. These permits cover such activities as bird banding scientific collecting, falconry, fur dealers, taxidermy and wildlife propagation to name a few. In addition, special use permits are issued for various activities involving wildlife that are not specifically covered in the permit section of the Game and Wildlife Code. The review and issuance of permits require considerable administrative time on the part of district, regional and Harrisburg personnel.

In an attempt to free field officers and regional personnel from this primarily administrative activity, so they may concentrate on other activities, beginning with the 1988 fiscal year, all permits are being directed to and handled by this division in Harrisburg. This new permit system will be more efficient and provide many individuals and groups with opportunities to pursue a livelihood, enjoy the out-of-doors and educate our youth, which might otherwise be prohibited or restricted.

### Deer Deterrent Fencing

During the fiscal year, the Commission furnished all materials necessary, with exception of gates, for the construction of high tensile six-wire electric deer deterrent fence for qualified landowners suffering significant deer damage to their crops, orchards or nurseries.

Over the year 36 applications for fencing were approved. Materials have been delivered to 24 of the applicants. One of the fences has been completed and the remaining 23 are in

various stages of construction. Material orders are in the process of completion for the balance of the applications approved.

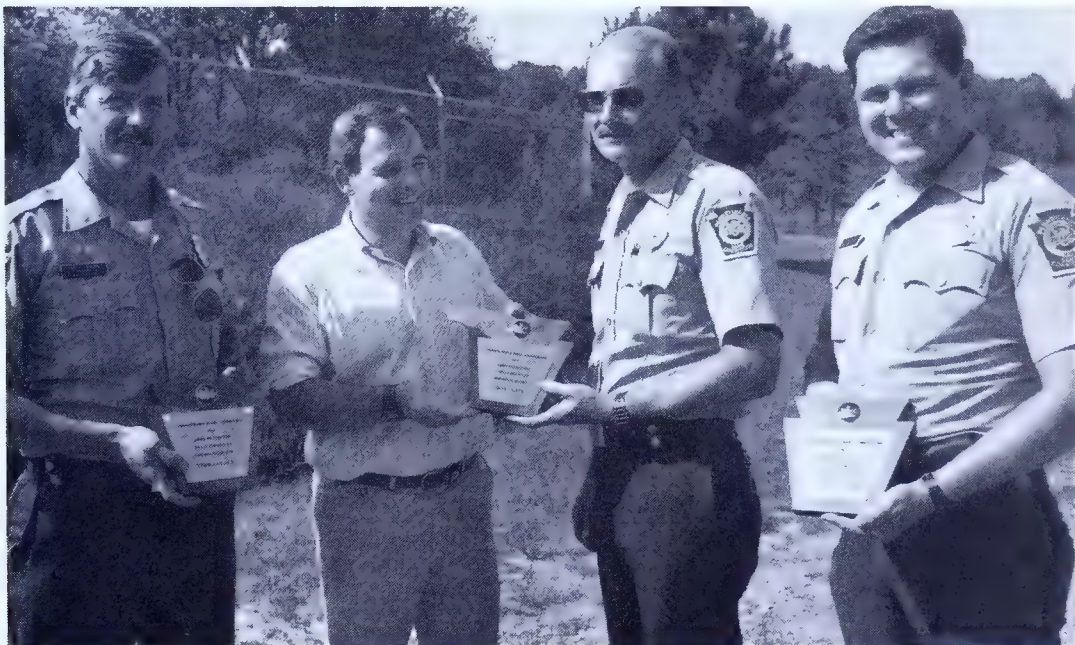
Average cost of the fencing materials supplied to these applicants during the year amounted to 52 cents per foot of perimeter, or \$180 per acre. Those costs include delivery of the fencing materials to the applicant by the successful bidder; they're no longer being handled by agency personnel.

A new fencing program, authorized by the Game and Wildlife Code, is being developed to give commercial forest landowners relief from deer damage, to provide adequate forest regeneration.

### Administrative Hearings

During the year 77 individuals requested Administrative Hearings. Of those, 66 involved hunting and furtaker license revocations. The hearings resulted in 44 revocations remaining as ordered, 11 revocations being rescinded, and in one revocation period being reduced. Six of the administrative hearings involved the recall of hunting and furtaker license issuing agencies. Those resulted in three agencies being recalled and three others being restored with probation. Three other hearings involved the recall of Special Permits issued. They resulted in one permit being recalled as ordered and two permits being restored with probation. The final two administrative hearings involved the revocation of hunting and furtaking privileges for involvement in hunting accidents. In both cases, license revocation periods were ordered.

**SKIP LITTWIN, Dauphin County WCO, second from right, earned top honors among salaried officers in the 1987 statewide revolver shoot. R.D. Hixson, right, Westmoreland County, and Mark Crowder, left, Fulton County, placed second and third, respectively. Top shooters among the deputies were Ronald Edmundson, Derry, Robert Klemish, Wilkes-Barre, and Roy Guthrie, Uniontown.**







## Uniform Equipment

During the fiscal year a second long sleeve and a second short sleeve khaki shirt were issued to each deputy wildlife conservation officer.

The 29 wildlife conservation officer trainees attending the Ross Leffler School of Conservation were equipped with necessary summer uniform equipment and all related miscellaneous uniform equipment.

An Inter-Agency Uniform Committee has been formed in cooperation with other commonwealth agencies utilizing similar uniform equipment in an attempt to provide better quality uniform equipment to personnel at a reduced cost to each agency by combining orders.

## Deputy Wildlife Conservation Officers

The Pennsylvania Game Commission is fortunate to have approximately 1000 men and women, from all walks of life, serving voluntarily as deputy wildlife conservation officers. These officers assist our salaried officers with a wide variety of duties and responsibilities. With an assigned area of approximately 335 square miles per district, and literally thousands of people per district, the many varied responsibilities of a wildlife conservation officer are too much for only one person to accomplish.

Throughout the years the agency has been able to train this volunteer group to be professionals in the wildlife management field. Training is done at district and region levels, so these officers receive a comprehensive understanding of law enforcement, legal procedures, wildlife management concepts, public relations, unarmed self-defense, firearms use and a host of other related agency programs.

Again, the Game Commission, sportsmen, and the general public are fortunate to have such a core of dedicated individuals willing to give of their time and talent to perform these duties.

## Bear Damages

Officers were busy checking out claims of bear damage to beehives and livestock during the fiscal year. Field personnel expended over 1300 hours investigating 462 bear incidents. As a result, 60 bears were trapped, marked and moved to other locations.

A tabulation of the reports submitted for claims indicates that 374 beehives and 30 pieces of livestock were destroyed by bears. Where damage was inflicted, electric fencing was made available to the landowner to preclude additional losses. This type of deterrent has been successful and will continue to be used to help protect bee colonies and livestock.

## BUREAU OF WILDLIFE MANAGEMENT Dale E. Sheffer Director

This was a year of transition for the Bureau of Wildlife Management. Eugene Nelson, Propagation Chief retired in January, following 41 years of dedicated and able service. He was succeeded by Loyalsock Game Farm Superintendent Carl Riegner. Calvin DuBrock, a biologist in the Land Management Bureau, was hired as Assistant Bureau Director and Research Chief. In January a bureau reorganization plan was approved by the Commission, renaming us the Bureau of Wildlife Management. Our research staff was organized into five research units — Forest Wildlife, Farm Wildlife, Migratory Game Birds, Furbearers, and Endangered and Protected Wildlife. Biologists William Shope, J. Hugh Palmer, Fred Hartman, Arnold Hayden and Jerry Hassinger were promoted to Program Supervisors for these units. Additionally, eight new research positions were authorized.

The bureau presently employs approximately 90 full and part-time personnel. A Harrisburg administrative staff of five oversees and facilitates the research and propagation programs. Twelve wildlife biologists and six wildlife technicians coordinate and conduct field research and surveys statewide. The five Game Farms of the Propagation Division rear ring-necked pheasants for increased hunting opportunities.

## Research Division

In 1987-88 the Research Division organized and coordinated 72 wildlife studies, surveys, and inventories. Thanks go out to the many district wildlife conservation officers, deputies, land managers, food and cover employees, and volunteers who gave their time and skills to assist in these projects. Results were used to develop management recommendations for hunting and trapping seasons, habitat improvement projects, and long-range planning. Annual progress reports or final reports were prepared for each active job during the year.

## Forest Wildlife

The Forest Wildlife Program Unit is responsible for research on deer, bear, turkey, elk, grouse, squirrels and snowshoe hares. The unit monitors population trends and develops management information for these species. In addition, research on grouse and turkey habitat



requirements is being conducted. In 1987 research on grouse age structures and food habits were completed.

New research was initiated in 1987 to measure the ability of various timber stand sizes in oak-hickory forests to support white-tailed deer. Using small enclosures containing known numbers of deer, dormant season feeding capacities are measured by monitoring deer weight changes during the winter. By using known daily energy requirements for deer, along with weight trends over a period of several weeks, biologists can estimate the ability of various habitats to support deer. Similar research in northern hardwood stands was completed in 1985. Findings from this research will permit us to refine our deer carrying capacity and population goals, thereby improving our deer management program.

In the spring of 1987 wildlife conservation officers collected embryo data from 1932 female deer killed by vehicles and other causes. During the 1987 deer season Game Commission biologists and foresters examined 27,580 deer at locker plants. The age, sex, and county of kill and whether they were taken during the antlered or antlerless season were recorded for each deer examined. Field officers examined an additional 6449 deer during the deer seasons.

During the summer turkey and grouse brood surveys, 2013 turkey and 808 grouse were observed by wildlife conservation officers. For each of the 1560 bear taken during the 1987 season, agency personnel recorded its age and sex, and where it was harvested. Agency personnel also conducted a winter elk survey in January of 1988 in which 134 elk were found.

These data collection examples represent just some of the information collected annually on forest wildlife. This information is used to evaluate population trends and develop season and bag limit recommendations.

### Farm Wildlife Program

In early 1987 the Game Commission obtained Sichuan pheasants, a subspecies from the Peoples' Republic of China, from Michigan in an effort to provide a pheasant strain better suited to today's farmlands. Especially noted is the Sichuan's preference for nesting in brushy areas as opposed to hay fields. The Commission obtained 40 Sichuan cocks, which were used by our Propagation Division to produce hybrid offspring by breeding them with wild-trapped ring-necked hens from southeastern Pennsylvania. In the fall of 1987, 1751 hybrids were released in central Mercer County and 583 on the Letterkenny Army Depot near Chambersburg. Both areas were closed to pheasant hunting. Follow-up studies have shown the birds at the Mercer site have adapted well, exhibited acceptable survival levels, and had a fairly high rate of reproduction. The birds at Letterkenny did not adapt well and exhibited a great deal of post-release

movement. Some brood production both on and off this area was noted. Additional releases on both areas were made last fall. Further studies of survival, population dynamics, reproduction and habitat use are planned. The results, especially from Mercer County, are encouraging, but several additional years will be required to adequately assess the success of this experimental program.

In 1985 an intensive habitat improvement program was initiated on SGL 249, York County, to aid in reestablishing wild quail populations. Following habitat improvements made on this area, 54 wild quail (24 in 1986 and 30 in 1987) were received from Maryland and Ohio and released in the study area. Field observations and hunter interviews in 1987 indicate 6 to 8 coveys were produced in the vicinity of these releases. Fall flushing rates in 1987 were 3 times greater than 1986. While management efforts appear to have been successful, continuing surveys will be conducted to determine the long-term feasibility of this effort.

Rabbit research, conducted as a cooperative project with the Pennsylvania State University Cooperative Fish and Wildlife Research Unit, into the effects of forest management practices on eastern cottontail population levels have indicated only limited increases. Plans are being developed to redirect these efforts to the New England cottontail. While only limited residual populations of New England cottontails

**MORE SEASONS, longer seasons, increased bag limits. Hunting opportunities are greater now than they've ever been before, thanks largely to the increasing sophistication of wildlife management techniques.**





## "SUPPORT SOMETHING WILD"

### Help Reintroduce the **River Otter**

Donate on Line 10C or 19C  
of the **State** income tax form  
to the  
Wild Resource Conservation Fund,  
Pa's Tax Checkoff.

Write for information:

Wild Resource Conservation Fund  
P.O. Box 1467  
Room A1-85, 3rd & Reily Streets  
Harrisburg, PA 17120



remain in Pennsylvania, the species is closely associated with early stage forest ecosystems and offers significant potential from woodland management procedures.

### Migratory Game Bird Program

The Migratory Game Bird Program Unit is responsible for research and population monitoring of waterfowl, woodcock, doves, and other migratory game birds. The unit consists of three wildlife biologists and two wildlife technicians.

Last year we continued to collect and evaluate waterfowl survey, band recovery, and hunting data to get the best possible results from our waterfowl management program. The results of our 1988 spring breeding pair survey suggest an increase in the breeding index of mallard, wood duck, black duck and Canada geese in Pennsylvania. We also are reviewing some intensive waterfowl/marsh vegetation management on SGLs 213 and 214 in Crawford County. Our personnel also have made a number of experimental plantings of aquatic vegetation to provide information, along with our other management suggestions, for improved waterfowl habitat management. In concert with other mid-Atlantic and Northeast states in the Atlantic Flyway, we are gearing up for intensive breeding surveys and duck banding starting in 1989. These efforts should provide a much im-

proved estimate of duck production in Pennsylvania and the Atlantic Flyway. Observations on neck-collared Canada geese continued and added needed information to the data about the mysteries of goose migration through Pennsylvania and in the Flyway.

We spent considerable effort on two planning projects: 1) developing long-range goals, objectives, and strategies for migratory game birds for the agency's Strategic Plan; and 2) contributing Pennsylvania's input into the North American Waterfowl Management Program and two eastern Habitat Joint Ventures.

Although there has been some improvement in woodcock populations in North America, we have continued to restrict hunting regulations to increase woodcock survival rates. We've also increased our research efforts to improve the reliability of our surveys to better monitor woodcock populations. We have greatly expanded our woodcock survey and banding projects in Pennsylvania, which has given us a better understanding of the status of our breeding population and enabled us to tailor appropriate hunting regulations.

### Furbearer Program

Furbearer Program research was initiated in 1979 so long-range management plans could be developed. It was then thought that fur resources were under heavy pressure because of high fur prices. A program was developed to start measuring trends in the more terrestrial furbearers—foxes, raccoons, coyotes, skunks and opossums. Each year scent station routes are conducted throughout the state to monitor the population trends of each of those species. A scent station is a three-foot circle of sifted soil with a scented cotton swab in the center. Visitations by species can be determined by footprints left in the fine soil.

A raccoon study completed in 1987-88 indicated population levels in the best range in Pennsylvania have approached 100 raccoons per square mile. Typical dairy forest habitat supports 35 to 50 raccoons per square mile. The population density is directly related to the number of den sites available.

Just a few months ago we began what will be annual surveys of furtakers to determine the annual harvests of furbearers. A new coyote range and abundance map is being developed to illustrate changes since 1982. A bobcat study is continuing in Lycoming/Sullivan County to determine population levels and to develop a population-habitat model for future management.

### Endangered and Protected Wildlife

Last year nine bald eagles, including one foster eaglet, fledged from natural nests in Pennsylvania. That may not seem like many, but it equals the entire production for the decade of the '70s. Possibly just as significant, an active eagle nest was found along Pine Creek, Tioga County, from which one eagle fledged. That's the first confirmed active eagle nest in



eastern Pennsylvania since at least the 1950s. Another 14 eaglets were obtained from Canada last year and raised and then released here. Since 1983, 76 transplanted eaglets have been hatched in Pennsylvania. We hope some of those birds reach maturity and return as natural breeders in the not too distant future.

For the first time since the 1950s, peregrine falcons, also nationally endangered, have been found nesting in Pennsylvania. Both pairs chose large bridges in Philadelphia for their nesting debut, and at least three young were produced.

Between 1980 and 1986, 111 young ospreys were translocated from the Chesapeake Bay to the Poconos where they were raised and released. When mature (three years old) many surviving birds return to the vicinity of where they were raised and build nests of their own. In 1986 the first Pennsylvania born ospreys since the 1950s hatched. In 1988, ten nests were found in the Poconos. Four of these nests contained a total of 11 young.

Seven female and 6 male endangered Delmarva fox squirrels have been translocated from refuges in Maryland to southeast Pennsylvania. Radio transmitters were attached to most of them. Radio tracking and live trapping will be used to monitor the outcome of this effort to restore still another previously extirpated species to its former range in Pennsylvania.

Using endangered species funds, bat-friendly gates were installed at the three entrances to Canoe Creek Mine in Blair County. This "cave" is the only site in Pennsylvania where the endangered Indiana bat is known to hibernate; numbering 297 at last count. The gates allow bats free access to this important winter hibernacula, but keep people out, thus protecting this endangered species (and five other bat species) when they are most vulnerable to disturbance.

Agency wildlife technicians searched for special concern mammals at 27 trap sites in 12 counties. These inventories yielded a West Virginia water shrew, a secretive subspecies that has been captured only twice before in Pennsylvania. The threatened woodrat was live trapped at 12 sites, including two new sites discovered in Cameron and Clinton Counties. Except for one site on a State Game Lands, woodrats can no longer be found east of the Susquehanna River. Technicians were unsuccessful in their attempts to find the rare, least shrew. It has been 25 years since this species has been collected in Pennsylvania.

"Located three miles south of Greenville, Mercer County, is the largest colony of breeding great blue herons in Pennsylvania. Over 225 nests are protected in this 45-acre sanctuary." That's the opening paragraph of a new brochure titled: "Brucker Great Blue Heron Sanctuary." Funds for this brochure and for a viewing shelter were provided by the Game Commission and the Wild Resource Conservation Fund. In 1988 this seasonal refuge pro-

tected 435 nestlings that fledged from 196 nests. The Brucker Sanctuary is an excellent example of private citizens and organizations, business and government working together for the conservation of wildlife.

Wildlife technicians recently completed a statewide survey of colonial nesting birds. Two yellow-crowned night heron, 48 great blue heron, and 3 multiple species colonies of black-crowned night herons, cattle egrets, great egrets and green-backed herons were surveyed. A new nesting colony of yellow-crowned night herons was discovered in the shadow of the state capital. Containing ten active nests, the heronry represents the largest nesting site for this species in the state.

The Game Commission built and distributed over 1600 bird boxes last year. Cavity Nester Cooperators (agency employees and volunteers) kept records on over 1700 nest boxes placed either for bluebirds, kestrels, wood ducks, squirrels, wrens, tree swallows or purple martins. Of the 1465 boxes placed for bluebirds, 682 were used. One cooperator had 85 percent use of 130 tree swallow boxes placed around water impoundments. Wood duck use of nest boxes was poor; only 1 of 81 boxes was used.

In 1988 the Game Commission, along with the National Audubon Society, launched a new and exciting program called "Volunteers for Wildlife." So far, over 1400 volunteers have joined this program, most choosing two or three of the 11 project choices. Not surprisingly, building an experimental, snag-like, bird box, and keeping a record of its use, was the most popular project (622 volunteers). We were pleasantly surprised when the second most popular project (590 volunteers) was a spring-summer bat survey. Through hands-on involvement in wildlife and habitat surveys, this program will help the Game Commission keep track of 288 "protected" wildlife species.

## Propagation Division

The Propagation Division is responsible for rearing ring-necked pheasants for release throughout the commonwealth. The Commission currently operates five game farms.

Over the past several years we have modified our propagation techniques in an effort to produce a bird better adapted to existing in the wild. As an example, automatic water systems were installed at the Eastern Game Farm. They minimize maintenance, the threat of disease, and human exposure to young pheasants. The Loyalsock Game Farm installed a computer lighting system in their environmental brooder houses. The lighting program minimizes human contact, stress on the chicks, and provides rest periods. This acclimates the pheasant chick to the amount of daylight that will be encountered when released into the natural environment. Those are just some of the new efforts the game farms are using to improve brooding and rearing practices.

Continuing efforts are being made to mini-



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mize human contact by immediately removing chicks from hatchers and transferring them to the brooder houses. When pheasant chicks are released from the brooder facilities, unmowed natural hay and natural grass fields are available to them. Additional roost areas are provided each year by installing poles and tree

tops in the holding fields. A diversity of food plots are planted to help acclimate ring-necked pheasants to natural food and cover they may encounter upon release in good habitat. These procedures are directed at producing a pheasant better adapted to the natural environment, thereby increasing its chances of surviving in the wild.

In 1987 the Propagation Division produced 237,719 ringnecks for release, providing sporting opportunities at an average estimated cost of \$11 per released bird. In addition to these releases, 35,550 day-old chicks, and 72,500 eggs were sold to sportsmen, private propagators and the public, resulting in \$25,467.50 revenue for the agency.

# **PGC FINANCIAL REPORT**

**July 1, 1987 to June 30, 1988**

**Ross E. Starner  
Comptroller**

The Balance Sheet and the Statement of Unreserved Fund Balance were prepared in accordance with Generally Accepted Accounting Principles (GAAP). The unreserved/undesignated balance in the Game Fund on June 30, 1988, computed on a GAAP basis, was \$29,172,633, an increase of \$5,196,738. This increase is primarily due to revenues earned in excess of expenses incurred for fiscal year 1987-88. Major expenditures in land acquisition and radio equipment are anticipated for the coming fiscal year. Total fixed assets reported by the Game Commission as of June 30, 1988, were \$59,317,104. Fixed assets are reported at cost or estimated historical cost; no depreciation is provided. Donated fixed assets are recorded at fair market value at the time of donation. All other schedules included in this report were prepared on a cash basis combined with an encumbrance budgetary system, and as such are consistent with that of the previous year.

At the end of fiscal year 1987-88, the Commission underwent a comprehensive coding structure change which will be effective in 1988-89 fiscal year. This change will provide more accurate accounting of Game Commission programs. Consequently, next year's report will include more detailed program costs.

Act 64 of 1987 provided for the payout of a portion of all fines, fees, and costs collected by the Judiciary into a restricted receipt account in the General Fund. These monies will support the establishment and operation of a statewide judicial computer system. The act requires that all fines collected by magistrates in the 1987-88 fiscal year, in excess of those collected during 1986-87, be transferred to a restricted account to be ultimately used for the computer system. Game Commission's obligation for the 1987-88 fiscal year amounted to \$249,367.97.

Actual revenue credited to the Game Fund

during the 1987-88 fiscal year was \$39,647,521, an increase of \$927,723, or 2 percent, over last year's actual cash receipts. The most significant revenue increase was in senior nonresident hunting licenses. The number of nonresident licenses sold increased 5408, or 9 percent, for a dollars revenue of \$412,936. The antlerless deer license sales also increased by 35,776, a 7 percent increase, for a dollar figure of \$179,401. Offsetting these increases were decreases in sale of coal of \$473,084, and ground rentals and royalties of \$617,502. The decrease in ground rentals and royalties is primarily due to the fact that very few new contracts were issued during 1987-88, resulting in a large decrease in bonus bid payments.

Actual expenditures and commitments for the current executive authorization totaled \$39,765,074, a decrease of \$1,591,258 from last year. The major increases to expenditures were salaries, wages, and benefits, up \$1,283,395; maintenance and improvements of building and grounds, up \$338,970. Offsetting those increases were decreases in the following: construction, engineering, and design of new buildings, down \$3,951,907; printing and advertising, down \$393,813.

Expenditures for the construction of the headquarters building are almost complete as evidenced by the fact that the building expenditures as a percentage of total commission expenditures, decreased from 12.6 percent in 1986-87 to 3 percent in 1987-88.

The Game and Wildlife Code stipulates that not less than \$1.25 from each resident hunter's paid license fee shall be used solely for the selection, restoration, rehabilitation and improvement of all land under the control of the Commission, to provide and improve habitat for the purpose of producing natural propagation of wildlife. The number of resident licenses sold during the 1987-88 fiscal year totaled



1,100,267. This mandated that a minimum of \$1,375,334 be expended for the above purposes. The agency actually expended \$2,766,218 and committed \$840,489 during the fiscal year for these purposes, for a total of \$3,606,707, an excess of \$2,231,373 over the law's requirement.

The new law also states that \$2 of each antlerless license fee be used solely for cutting or otherwise recovering overshadowing tree

growth to produce underbrush sprouts and saplings for deer food and cover on Game Lands. Antlerless deer licenses sold during the 1987-88 fiscal year totaled 559,833. This mandated that a minimum of \$1,119,666 be expended for the above mentioned purposes. The agency actually expended \$1,249,782 during the fiscal year for this purpose, an excess of \$130,116 over the requirement.

## SCHEDULE OF ACTUAL REVENUE DEPOSITED IN GAME FUND FISCAL YEAR ENDED JUNE 30, 1988

### LICENSES AND FEES

Resident Hunting—Adult .....	\$ 11,170,134
Resident Hunting—Junior .....	584,866
Resident Hunting—Senior .....	642,474
Resident Lifetime Hunting—Senior .....	76,724
Nonresident Hunting .....	5,257,278
Nonresident Hunting—Junior .....	106,004
Resident Bear .....	949,788
Nonresident Bear .....	43,508
Antlerless Deer .....	2,810,171
Archery .....	1,264,596
Muzzle Loading Hunting .....	392,683
5-Day Nonresident Small Game .....	39,979
3-Day Regulated Shooting Ground .....	7,449
Resident Furtaker License—Adult .....	435,761
Resident Furtaker License—Junior .....	30,745
Resident Furtaking License—Senior .....	25,998
Senior Lifetime Furtaker License .....	3,194
Nonresident Furtaker—Adult .....	23,626
Nonresident Furtaker—Junior .....	282
Issuing Agents' Application Fee .....	31,469
Special Game Licenses .....	238,912
Rights-of-Ways .....	309,086
<b>Total Licenses and Fees .....</b>	<b>\$24,444,727</b>

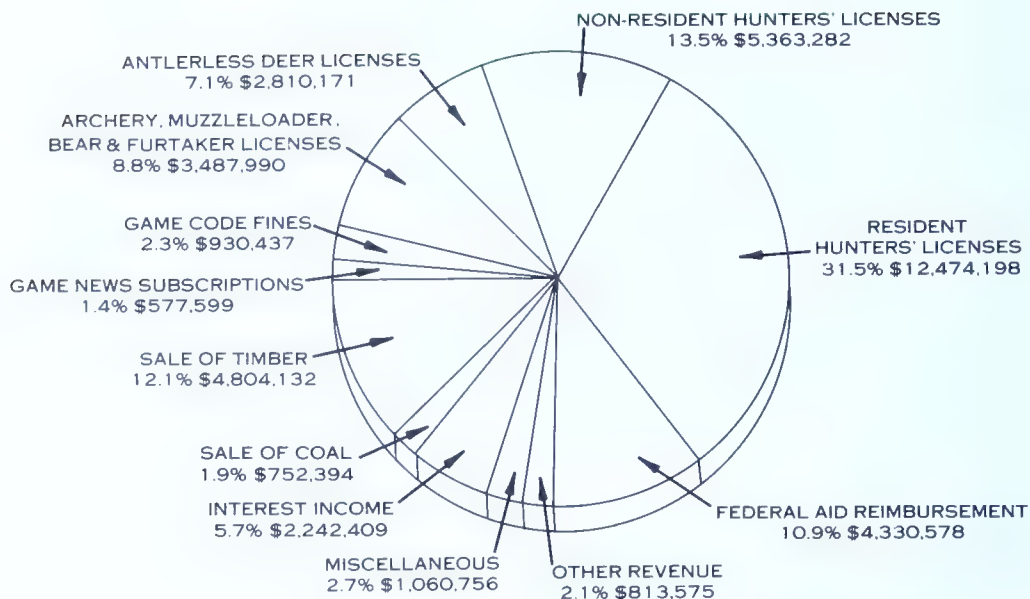
### FINES AND PENALTIES

Game Law Fines .....	\$ 930,437
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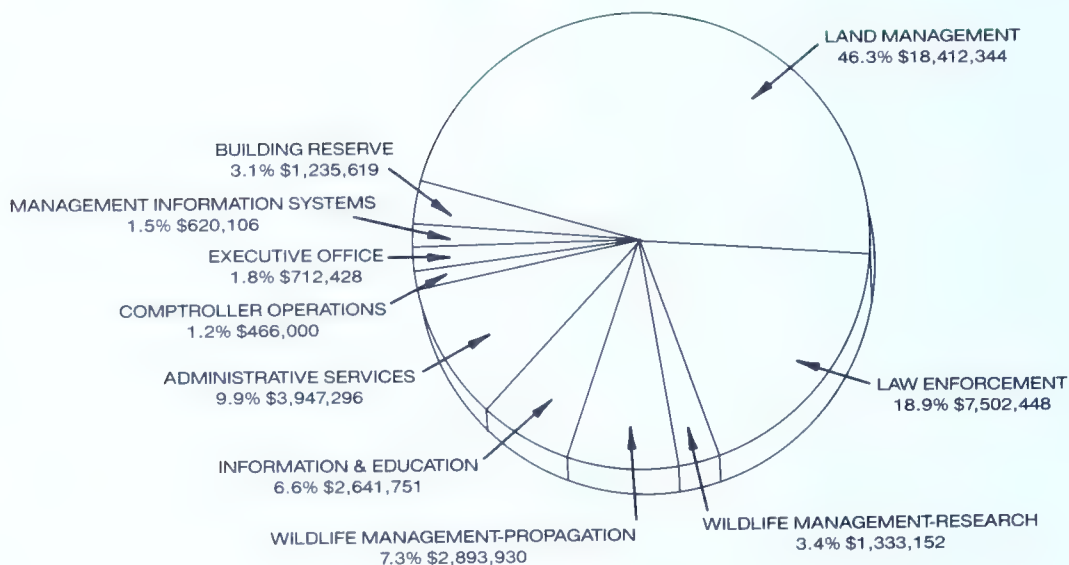
### MISCELLANEOUS REVENUE

Interest on Securities & Deposits .....	\$ 2,242,409
Sale of Timber & Other Wood Products .....	4,804,132
Sale of Coal .....	752,394
Ground Rentals & Royalties from Oil and Gas Lease ...	305,268
Sale of GAME NEWS .....	577,599
Wildlife Promotional Publications and Materials .....	71,388
Wildlife Nongame Fund .....	63,536
Waterfowl Management: Stamp Sales & Art Print	
Royalties .....	91,779
Sale of Skins and Guns .....	93,831
Other	
(Donations, game land map sales, sale of grain and	
hay, SPORT promotional items, sale of stone,	
sand, gravel, prior year expenditure refunds)	249,648
<b>Total Miscellaneous Revenue .....</b>	<b>\$ 9,251,984</b>
<b>Total Nontax Revenue .....</b>	<b>\$ 34,627,148</b>

**GAME COMMISSION REVENUE**  
**\$39,647,521**  
**FOR FISCAL YEAR ENDED JUNE 30, 1988**



**GAME FUND EXPENDITURES AND COMMITMENTS**  
**\$39,765,074**  
**FOR FISCAL YEAR ENDED JUNE 30, 1988**





<b>AUGMENTATIONS</b>	
Federal Aid .....	\$ 4,330,578
Sale of Vehicles .....	172,300
Sharecropping & Agricultural Leases .....	53,620
PA Conservation Corps .....	293,979
Donations .....	90,060
Endangered Species .....	60,600
Hunter-Trapper Ed Camp Program .....	15,486
Youth Shooting Sports Competition Program .....	3,750
Total Augmentations .....	<u>\$ 5,020,373</u>
<b>GRAND TOTAL ALL REVENUE IN GAME FUND .....</b>	<b><u>\$ 39,647,521</u></b>

SCHEDULE ACTUAL COMMITMENTS & EXPENDITURES  
 BY ORGANIZATION  
 Current Executive Authorization  
 For the Fiscal Year Ended June 30, 1988

Executive Office .....	\$ 712,428
Comptroller Operations .....	466,000
Bureau of Administrative Services .....	3,947,296
Information and Education .....	2,641,751
Game Management – Propagation .....	2,893,930
Game Management – Research .....	1,333,152
Law Enforcement .....	7,502,448
Land Management .....	18,412,344
Building Reserve .....	1,235,619
Bureau of Management Information Systems .....	620,106
Total Commitments & Expenditures .....	<u>\$ 39,765,074</u>

GAME FUND BALANCE SHEET, JUNE 30, 1988

<b>ASSETS</b>	
Cash with Treasurer .....	\$ 1,129
Cash in Transit .....	11,411
Cash-Advancement Accounts .....	227,608
Temporary Investments .....	32,636,000
Accrued Interest Receivable .....	197,405
Due from Other Commonwealth Funds .....	4,617
Grants Receivable – Federal Government .....	851,014
Fixed Assets .....	59,317,104
Total Assets .....	<u>\$93,246,288</u>
Vouchers Payable .....	\$ 797,743
Accounts Payable and Accrued Liabilities .....	1,402,282
Due to Other Commonwealth Funds .....	649,000
Due to Other Governments .....	55,000
Total Liabilities .....	<u>\$ 2,904,025</u>
<b>FUND EQUITY</b>	
Reserved from Current Encumbrances .....	\$ 1,838,144
Reserve for Restricted Revenue .....	14,382
Fund Balance Unreserved/Undesignated .....	29,172,633

Investment in Fixed Assets .....	59,317,104
Total Fund Equity .....	<u>\$90,342,263</u>
<b>TOTAL LIABILITIES AND FUND EQUITY .....</b>	<b>\$93,246,288</b>

**GAME FUND**  
**STATEMENT OF UNRESERVED FUND BALANCE**  
**FOR THE FISCAL YEAR ENDED JUNE 30, 1988**

Fund Balance — Unreserved/Undesignated, June 30, 1987	\$23,975,895
Add: Actual Cash Receipts, July 1,	
1987 through June 30, 1988 ...	39,647,521
Revenue earned as of June 30,	
1987 and deposited in 1987-88	( 651,233)
Revenue earned but not received	
as of June 30, 1988	
Licenses & Fees .....	\$ 9,278
Miscellaneous Revenue ....	2,133
Interest on Short Term	
Investments .....	413,846
Due from Other Funds .....	4,617
Due from Federal Gov't	
(Grants) .....	<u>851,014</u>
Total Revenue accrued but not	
received as of June 30, 1988 ..	1,280,888
Total Revenue Earned during 87-88 .....	40,277,176
Lapses from prior year appropriations .....	<u>4,732,713</u>
Unreserved-Undesignated Fund Balance	
Before Commitments and Expenditures .....	68,985,784
Deduct: Current Year Expenditures and	
Commitments posted from	
7/1/87 through 6/30/88 .....	39,765,074
Expenditure Accruals as of	
6/30/88 .....	2,069,115
Commitments liquidated against	
6/30/88 expenditure	
accruals .....	( 4,662,255)
Total Expenditures and Commitments before fiscal year	
1986-87 accrual reversal .....	37,171,934
Reversal of Commitment and Expenditure Accrual for	
1986-87 .....	<u>2,641,217</u>
Fund Balance-Unreserved/Undesignated, 6/30/88 .....	<u><u>\$29,172,633</u></u>

**EXPENDITURES AND COMMITMENTS**  
**CURRENT EXECUTIVE AUTHORIZATION**  
**FOR THE FISCAL YEAR ENDED JUNE 30, 1988**

Salaries and Wages .....	\$16,161,457
State share employee benefits .....	5,878,636
Land purchases and acquisition costs .....	4,979,871
Construction, engineering, design and administration	
of new headquarters building .....	1,235,619
Printing and advertising .....	1,399,776
Automotive repairs, supplies, and rentals .....	1,003,352



Payments to local municipalities in-lieu-of taxes .....	782,449
Maintenance and improvements of building, grounds, and machinery .....	1,384,114
Payments to other State agencies:	
Comptroller services rendered .....	466,000
Auditing services .....	23,974
Civil Service & Personnel services .....	45,270
Purchasing services .....	28,296
Checkwriting and disbursement services .....	76,183
EDP Contractual service .....	170,836
Pheasant feed .....	377,511
Wildlife habitat seedlings and plantings .....	58,784
Purchase of motor vehicles .....	1,390,228
Travel and special conference expenses .....	549,268
Radio and communications equipment purchases and contracted maintenance service .....	105,908
Telephone expenses .....	383,201
Building rentals and land rights-of-way lease payments ..	87,739
Postage .....	464,789
Heating, power and light .....	405,178
Legal, appraisal, and consulting fees .....	269,432
Other supplies and services .....	188,977
Uniforms for Game Commission personnel .....	116,488
Office equipment, maintenance, rentals, and supplies ...	260,420
Purchase of equipment and machinery .....	681,885
Electronic data processing contractual services, rentals, and purchases .....	337,518
Educational supplies, literature, and classroom training equipment .....	157,925
Research grants to universities and wildlife associations ..	105,000
Insurance—auto, liability, fidelity .....	89,776
Clinical services, laboratory and medical supplies .....	14,848
Payments to individuals for bear damage claims .....	35,754
Deer fencing .....	48,612
<b>TOTAL .....</b>	<b>\$ 39,765,074</b>

#### SCHEDULE OF FIXED ASSETS JUNE 30, 1988

Land .....	\$48,656,380
Buildings & Building Improvements .....	8,726,490
Machinery and Equipment .....	1,934,234
<b>TOTAL FIXED ASSETS .....</b>	<b>\$ 59,317,104</b>

#### Use 800 Numbers

Use the agency's new toll free (800) numbers to contact a wildlife conservation officer; their home phone numbers are no longer being published. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral Region, 1-800-422-7551; Southcentral Region, 1-800-422-7554; Northeast Region, 1-800-228-0789, and Southeast Region, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.



**ONE SQUIRREL** (the female, I presume) would be out along a branch with her tail completely flat over her back and head, while the other squirrel would climb to a branch directly above the prone squirrel and peer down at her.

## The Private Lives of Gray Squirrels

By Marcia Bonta

**H**OW LITTLE we know about the private lives of wild animals. Only if we are lucky do we ever get more than a fleeting glimpse of one.

Take gray squirrels, for example. What animal could be more common and easy to observe than *Sciurus carolinensis*, otherwise known as “shadow tail,” “cat squirrel,” “bannertail,” “timber squirrel,” or “silvertail?” But although gray squirrels are ubiquitous in eastern city parks and suburban lawns, any hunter will tell you that one in the wilds is an entirely different creature. Unlike its city and suburban relatives, it doesn’t panhandle for a living, and it knows that for all sorts of predators it is a hunted animal. So it is wary, hard to see, and hard to shoot—a worthy opponent to anybody with a gun.

But when hunting season is drawing to a close and January settles down on the landscape, the gray squirrel becomes a different animal. It usually doesn’t awake until nine, and it spends a good many daylight hours abroad, searching for buried food and chasing or being chased—depending on its sex—and it often does not mind being observed by a quiet human. Or so it seemed that January 23 when I was first offered a ringside seat to squirrel behavior.

It was 30 degrees, clear and beautiful, with two to three inches of snow on the ground. I set out on my usual three-mile, late morning walk over our mountaintop acres. The woods were silent except for a mixed flock of brown creepers, white-breasted nuthatches and



black-capped chickadees that I encountered where Laurel Ridge Trail merged into the Far Field Road. The latter is a flat old road that winds above a hollow and offers a walker, especially in winter, a clear view of grapevine-entangled oak woods and fallen trees. The wild creatures seem to love this road as much as I do, and it is always riddled, in winter, with the tracks of white-tailed deer and wild turkeys, red foxes and gray squirrels. Often I see those animals on the trail ahead of me but I never hear them. So I was surprised this one morning when the silence was broken by unknown animal noises down in the woods below the road.

Immediately I sat on a fallen log facing the sound and traced it to three gray squirrels frolicking in a large tree. Gray squirrels, the books say, are not noisy like red squirrels, but they do have alarm calls which include barks, grunts and possibly even a song. They also talk among themselves, one author claims, in light chuckles that sound almost musical. But the sounds I heard could only be described as odd, begging noises, and as I watched I decided I was observing courtship rites.

Gray squirrels are usually solitary creatures, but during mating times (in January and February and again in June and July in Pennsylvania) several males will chase a female in heat. In this case, it looked as if two males were vying for the attention of one female. For several minutes they seemed to be chasing for the sheer fun and exercise of it. But then one squirrel suddenly paused on a branch, face to face with a second squirrel, and slowly flicked its tail like an undulating wave. The third squirrel scampered on down the tree trunk and ran off into the woods, leaving the two remaining squirrels to continue the chase.

With the disappearance of that squirrel, the chasing slowed down. In fact, the longer I watched, the more the chasing seemed to resemble a stylized dance, like ballet, with every motion known ahead of time by the participants.

Not only was the chasing slow and graceful, but it also was punctuated with long pauses, when one squirrel (the female, I presumed) would be out along a branch with her tail completely flat over her back and head while the other squirrel would climb to a branch directly above the prone squirrel and peer down at her. The first pause lasted five minutes and was broken when the prone squirrel climbed up to face the seated squirrel for a silent second or two, then clambered several yards back down the tree to another, much lower branch.

Before it settled into the same prone, tail over body and head position, it made a noise like a plunked banjo string, and the other squirrel sat up more alertly. Silence and stillness for close to ten minutes prevailed before the stylized, slow motion chasing resumed, this time accompanied by whimpering noises. As they chased they rippled underneath as well as on top of the branches like furry serpents.

### Abruptly Ended

For the third time they stopped, returned to their respective branches and positions and an even longer period of stillness. And then the scene abruptly ended when the third squirrel suddenly streaked back up the tree. All three squirrels ran to the ground, squeaking like overgrown mice, and disappeared into brushpiles.

For weeks I puzzled over what I had seen. The books were no help because they claimed that gray squirrels always disappeared when they saw people and that, consequently, no human had ever witnessed gray squirrel courtship. But I had been sitting out in the open, had shifted around and even moved to a more comfortable log, and had had the distinct impression that the squirrels knew I was there and didn't care. I was disappointed, though, that I had seen no actual mating, but again the books claimed that gray squirrels always mated in the privacy of their nests.

Months passed and suddenly it was the middle of June. The early morning

woods were filled with young creatures, and when I first heard the chirring and glimpsed what appeared to be a platoon of gray squirrels racing up and down the trees beside the Guesthouse Trail, only a couple hundred yards up in the woods beyond our home, I thought they were youngsters playing. After all, gray squirrels are born as early as February in Pennsylvania, 40 days after mating, and need less than three months to mature enough to explore their arboreal environment.

Curious, I sat down to watch their treetop play. I quickly realized, however, that they were not playing. Once again I was watching courting squirrels, although these squirrels were acting more like the books described, moving so fast that I found it difficult to sort them out. Gone was the stylized ballet. In its place were six males in mad pursuit of a single female. Gradually one male gained ascendancy and, while the others retreated to the woods' floor, it was he who followed her out on to the thinnest branches where she would face him down, chirring loudly and threatening to nip him if he approached. He would chirr back with his own threatening noises, but always, at the last possible moment, she would leap to another tree and the chase would resume.

I sat mesmerized by the action which

went on for nearly an hour until the five other males suddenly reappeared and all six chased her. Once she led her entourage to within five feet of where I was and after glancing over at me they raced on. Pieces of bark loosened by the squirrels rained down on my head.

Finally one male cornered her, drove off all his rivals, and mated with her high in the rocking branches of a tree. She shook him off after about ten seconds and streaked down the tree trunk. Again she was isolated by a male, but whether it was the same one I could not tell, having lost track of the original victor. This time she fought a little harder, facing him off, chirring loudly, and twice he retreated before mating with her on a lower tree branch.

For the third time, she escaped and, with all six males in pursuit, she ran off into the laurel and disappeared.

I could hardly believe my luck. After years of wandering in the woods and seeing many unfinished vignettes of wild animal life, I had finally had at least one segment completed for me which had started months before by different squirrels in a different place. But this time there could be no doubt that I had witnessed not only the courtship but the mating of gray squirrels. And the books were wrong. Gray squirrels, or at least those gray squirrels, mated in the open, and they did not seem to mind a human observer in the least.

But, as usual, I was left with questions. Why had the two courtships been so different? Had the winter squirrels been in an earlier, less frantic stage of courtship or was a winter courtship more leisurely than a summer one? Did courtship techniques vary in gray squirrels depending on the number of squirrels involved and/or the squirrels themselves?

Being left with questions, however, is part of the reason why observing the private lives of wild animals is so fascinating. With a little bit of time and a lot of luck, you can add, as I did, to the meager store of knowledge humans have about the life styles of creatures as common as gray squirrels.







**MEET ORION.** You'll find him in the stars, placed there a long time ago by Diana, the goddess of hunting. Look for the three closely spaced stars forming his belt—it is a conspicuous group.

## *The Celestial Hunter*

**By Eugene R. Slatick**

**S**TEP OUTSIDE the next clear night and meet Orion, the hunter. You'll find him in the stars, placed there a long time ago by Diana, the goddess of hunting. Orion the myth and Orion the constellation—both can stir the imagination.

No ordinary mortal, Orion was the son of the god Neptune. The ancient Greeks and Romans tell us that Orion was a mighty hunter, handsome and charming, with the strength of a giant. He led an adventuresome life, becoming a constellation after he was slain. But just how he was killed is the subject of several different stories.

In one version, Orion and Diana were both hunting boar when they met and fell in love. For Diana, also known as

Artemis, it was a new experience. Until then, she had preferred to devote herself to hunting with her pack of hounds and to protecting wild animals from abuse. As a divine gamekeeper, Diana severely punished anyone who wantonly slew game.

Apollo, Diana's twin brother, was disturbed as he watched Orion and Diana spend long days hunting together. This sun-god and prince of archery had little use for mortals. He would never tolerate a romance between his sister and Orion.

So, one day when Orion was swimming far from shore, Apollo surrounded him with sparkling reflections of sunlight. The glare concealed Orion's form, leaving his head to appear as a dark floating object.



**NO ORDINARY** mortal, Orion was the son of the god Neptune. The ancient Greeks and Romans tell us that Orion was a mighty hunter, handsome and charming, with the strength of a giant.

Diana killed Orion in a fit of jealous anger as he was being carried off by Eos, the goddess of the dawn. A still different story claims that Orion was killed by a scorpion, sent by the great god Zeus who was annoyed by Orion's boasting that no animal could ever overcome him. But even in these stories, it was Diana who placed Orion in the heavens.

Mythology books may differ over the stories of Orion, but star gazers agree that Orion is a spectacular constellation. You can see Orion in the southern sky from fall to spring. He steps over the eastern horizon about 10 p.m. in mid-October. Rising four minutes earlier each night, Orion is up at 8 p.m. in mid-November and 6 p.m. in mid-December. In January he is above the horizon before the sun sets.

Open your imagination as you visualize Orion's shape among the stars. Look for the three closely spaced stars forming his belt—it is a conspicuous group. Below them hangs his starry sword.

Orion's shoulders are broad. The right shoulder is marked by the bright reddish star Betelgeuse ("shoulder of the Giant"), and the left by the bluish-white Bellatrix. Orion's head, a faint group of stars, is difficult to see. But his left foot sparkles with the brilliant Rigel ("foot"). It is Orion's brightest star and far outshines Saiph, the star in his right leg. Orion wields a club in his raised right arm. His outstretched left arm grasps a shield to fend off Taurus the Bull, seen pawing the sky to the west.

Without doubt, the most striking object in Orion is the great Orion Nebula, found in his sword. With the unaided eye, it appears as a hazy patch. With a binocular it becomes a glowing cloud, and with a telescope a swirl of incandescent gas. Astronomers tell us that stars are being created in the Orion Nebula.

Orion also contains the unusual Horsehead Nebula, a "dark nebula" lo-

Then Apollo found Diana, who was lounging on the shore, and challenged her to shoot an arrow into the scarcely visible object floating in the distance. Diana, eager to prove her skill, placed an arrow in her silver bow and took careful aim. The arrow flew across the water and, with deadly accuracy, struck its target. But not until Orion's body washed ashore did Diana realize what had happened—that Apollo had tricked her into killing Orion.

### Memorialized

Diana tried desperately to restore life to her beloved hunting companion. Failing, she took Orion in her arms and carried him to the darkest part of the heavens, where he would be memorialized among the stars. For company, she also placed two of her hunting dogs near him. One is now the constellation Canis Major, the Greater Dog, which contains Sirius, the brightest of all winter stars. The other is Canis Minor, the Lesser Dog.

In another version of Orion's death,



cated just below the eastern part of the belt. In that area, clouds of gas and dust block off the light to create a silhouette of a horse's head. The Horsehead Nebula is often shown in photographs, but only a large telescope reveals it visually.

The stars in Orion's shoulders and feet are not ordinary stars—they are supergiants. Betelgeuse, about 800 times the size of the sun, is so large that its actual disc has been detected. Rigel is about 30 times larger than the sun, Saiph about 20 times, and Bellatrix about 12 times.

Just as Orion's mythology goes far back in man's history, so does the constellation's starlight. The light from Betelgeuse, Rigel, and Bellatrix takes 500 to 900 years to reach us. Light from Orion's belt and the Orion Nebula must travel about 1500 years before arriving here. Saiph's starlight takes even longer—2100 years. Considering that light travels 5.9 trillion miles per year, the stars in Orion are inconceivably far away. Light from the sun takes about eight minutes to reach Earth. But the light we see in Orion's belt began its



**Question**

What animals may my son hunt with his BB gun?

**Answer**

None. Under the Game and Wildlife Code, it is illegal to use any device operated by air, chemical or gas cylinder by which a projectile of any size or kind can be discharged or propelled for hunting any wild animal in Pennsylvania.

journey when the Roman Empire was ending.

Take some time these dark nights to look at Orion as he travels across the heavens. His starry figure is something for us to admire, just as Diana intended.

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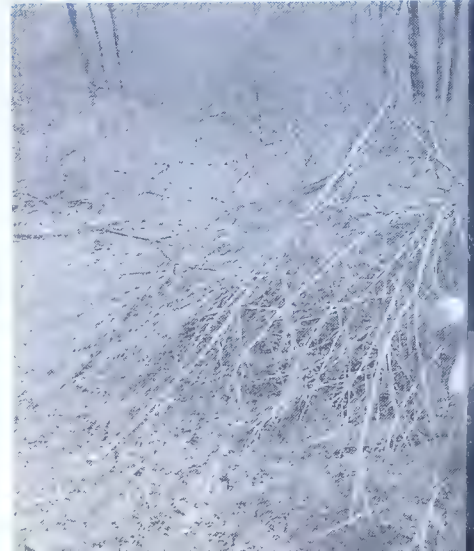
**BRUSHPILES** are most beneficial when built near food and water. The less distance animals must travel for those needs, the greater their chances of survival. An ideal location would be between fields or pastures and woodlots. NOTE the protective eyeglasses, chaps, gloves and hard hats.

Ore  
along  
life,  
cau



**BEST** is to build the brushpiles in conjunction with a border cutting. Clearing trees from field borders will allow shrubs and herbaceous plants to spring up, providing a reliable food source for rabbits and other animals, and the fallen trees can be cut up and used as materials for constructing the pile. A side benefit of brushpiles is that the area is left fairly clean around them, which will stimulate even more plant growth.

**START** by building a platform made of several logs at least five inches in diameter. The base provides wide escape cover for wildlife underneath and the life span of the pile. After building the location, pile on the smaller branches and twigs in a pyramid shape. The brushpile should be at least 12 feet high and seven feet in diameter. One 12 feet across seems to be ideal.





# RUSHPILES for COTTONTAILS

past decade or so, cottontail rabbits, many other species of farmland wild-  
declined in many areas, largely be-  
habitat loss and changing agricultural  
practices. This decline has  
prompted many landowners  
and sportsmen to ask what they  
can do to help. In many cases,  
all rabbits need is protective  
cover, and one of the best ways  
of providing cover is by build-  
ing brushpiles. But there's more  
to building brushpiles than just  
piling up brush. Here are a few  
scenes of Food and Cover Corps  
members Charles Solderich,  
Charles Mertz and James Bo-  
land building a brushpile that  
works.

PGC Photos by Bob Haines



**FINISHING** the brushpile off with large branches or small trunks will help it retain its shape for a long time. Brushpiles benefit not only cottontails, but also woodchucks, grouse, and a host of other small animals.



**STEPHEN OPET**, Tamaqua, below, knows from first hand experience as a Game Commission land manager, that brushpiles work. In fact, Steve feels that building brushpiles is one of the best ways sportsmen and land-owners can improve conditions for cottontails on private land. Contact the Game Commission if you'd like more information on rabbit management techniques.





# FIELD NOTES

## Wasn't All Bad

Last summer's drought left many ill effects, but some positive ones, too. The low water levels allowed smartweed and many other semi-aquatic plants to spread out on the exposed grounds. When the rains refill these areas there will be an abundance of waterfowl food. It also was interesting to see that when the water levels dropped, the only remaining water was often in the channels that had been cleared by our aquatic weed and channel cutter. These channels surrounded by dry ground made excellent nesting conditions for local waterfowl. —LMO Keith Harbaugh, Meadville.



## What He Expected

**CENTRE COUNTY**—Don Cameron, State College, was having a woodchuck problem. One was in the habit of chewing the spark plug wires on Don's pickup. After getting a box trap he tried all the normal woodchuck fare—lettuce and carrots, for example—but he had no luck. Finally, in frustration, he threw in—you guessed it—several spark plug wires, and promptly caught the critter the next day. —WCO Jack Weaver, Bellefonte.

## Learned His Lesson

**TRAINING SCHOOL**—Since my acceptance at the training school I've had little time to train my Labrador retriever. Therefore, one Sunday morning I skipped church and took my dog to a nearby Game Lands impoundment for some retrieving practice. As we were walking in I heard somebody whisper my name. I looked around but saw no one. Just hearing things, I thought. We took a few more steps and I heard my name again. That got me to thinking somebody "upstairs" was trying to tell me I should have gone to church. Then I spotted Larry Small, a local freelance writer/photographer, who was photographing a flock of turkeys. Needless to say, I now do my dog training on Sunday afternoons. —Trainee Jerry A. Bish.

## Just Around the Corner

**TRAINING SCHOOL**—With the hunting seasons about over, start thinking ahead. Spring gobbler season will be here before you know it, so now's a good time to become proficient with your turkey calls. Low prices are often offered on hunting gear now, and a great way to spend a cold winter evening is by the fireplace or wood stove, with a good turkey hunting book. —Trainee Richard Larnerd.

## Well Versed

**TRAINING SCHOOL**—Among the many subjects covered at the school is one titled "Outlaw Hunting Techniques," in which we learned the unethical and illegal methods of hunting and trapping. So upon graduation this spring, we will be not only well trained officers, but also well trained outlaws, ready to find those who don't view hunting and trapping as a privilege. —Trainee L. L. Spotts.



## Good Friends

**TRAINING SCHOOL**—I would like to take this opportunity to thank all the friends who offered to help with household repairs while I've been away.—Trainee Robert W. Norbeck.

## On a Tight Schedule

**NORTHUMBERLAND COUNTY**—A radio conversation between the region office and a conservation officer went like this, "the airport called and said the deer they went to get had already taken off." All I can figure is that the deer was one of Santa's reindeer.—WCO James M. Kazakavage, Sunbury.

## Ringin' Ears

**LUZERNE COUNTY**—Last year will long be remembered as the year of the Bonus Deer Tag. I was on duty for five days at the Bloomsburg Fair, and it seemed everybody who came to the fair stopped at our booth and asked about the new program. I'm not sure I'll ever recover from "Bonus Questionitis."—WCO Robert W. Nolf, Conyngham.

## Logical Slogan

**WASHINGTON COUNTY**—When I noticed a bumper sticker that read, "Drive Defensively—Wear Seat Belts," I immediately thought of one for hunters, "Hunt Defensively—Wear Fluorescent Orange."—WCO R. Matthew Hough, Washington.

## You Bet

**TRAINING SCHOOL**—While at Middle Creek a few of us trainees were watching a red fox hunt in a nearby field. Several of us loaned our binoculars to some visitors so they could get better looks. One young lady was amazed at how small the fox actually was. She thought they were as large as wolves. It just goes to show, Game Lands are great places to learn about wildlife.—Trainee Paul G. Surgent.



## No Reason to Quit

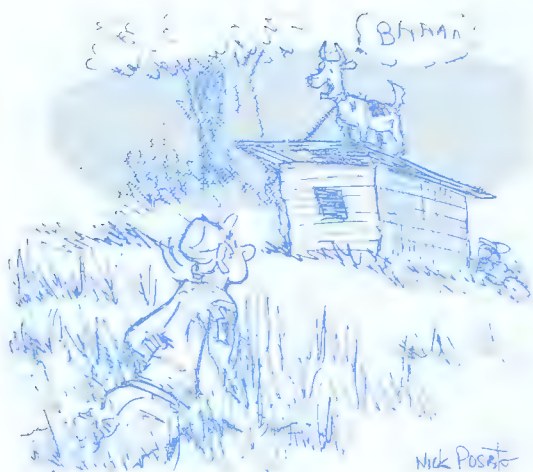
**TRAINING SCHOOL**—For those not ready to hang up the rifle or shotgun for another year, remember, crows are in season until April 9, and, for those who have a furtakers license, foxes may be hunted until February 25.—Trainee Kenneth J. Packard.

## Big Job, No Matter Where

**ARMSTRONG COUNTY**—While on a great trip to Alaska I had an opportunity to swap notes with a conservation officer up there. Our jobs are very similar with just a few differences. The population of his hometown is only 168, so he doesn't spend as much time as I do on public relations work; his main mode of transportation is an airplane, mine is a jeep; and the mountains up there are just a little bit higher than ours. Overall, it seems conservation officers everywhere have the same headaches and the same rewards.—WCO Barry J. Seth, Worthington.

## Plan Early

**DAUPHIN COUNTY**—I'm always amazed at how many people neglect to take their children to a local hunter-trapper education class and, instead, end up traveling 20 or more miles. If you or your child is going to need a course this spring, chances are that one will be given in your area sometime in March or April.—S.R. Bills, Halifax.



### Misinformant

**FOREST COUNTY**—An informant called with information concerning the illegal possession of a deer. On investigation, I crawled across a field for about 150 yards, to get a look at an apple tree on which I had been told there was a deer tied. When I got within 60 yards the animal sighted me, jumped up on the roof of a shed, and started bleating. I immediately knew it wasn't a deer but an excited nanny goat. —WCO Al Pedder, Marienville.

### Well Prepared

**CLARION COUNTY**—Like many people, I followed last summer's news accounts of the large forest fires out West. In just Wyoming over 550,000 acres burned, an area larger than the Allegheny National Forest. That got me to thinking about how fortunate we are in Pennsylvania. Although our state is nearly 70 percent forested, our forest fires are measured in the hundreds of acres, not hundreds of thousands. In DER's Bureau of Forestry we have one of the best fire prevention and fire fighting organizations in the country. Last summer we had two small fires in this county on State Game Lands; both were set by arsonists. Thanks to the quick response by local fire fighters and Bureau of Forestry personnel, our combined losses were held to only 30 acres. —WCO Gordon Couillard, Clarion.

### Significant Problem

**CLEARFIELD COUNTY**—The records of a licensed wildlife rehabilitator in my district indicate that domestic cats are responsible for 75 percent of all the injured or orphaned wild animals she handles. If you're a cat owner, please control your pet, especially in the spring and summer, when this senseless carnage is most severe. —WCO Colleen M. Shannon, Luthersburg.

### Student to Teacher

**TRAINING SCHOOL**—The smiles and looks of accomplishment when students passed the Hunter-Trapper exam I helped teach last fall brought back memories of 19 years ago, when I took the class, and it was gratifying to play a small role in helping those new sportsmen get started. They earned the privilege to hunt and trap in Pennsylvania, and with that comes the joy of experiencing a great American heritage. —Trainee Scott J. Lorow.

### Lucky Bruin

**CLINTON COUNTY**—After fellow officer Ron Stout and I captured a nuisance bear, we noticed a 5-inch gash through the hide and muscle on the bear's right shoulder. We took it to Lock Haven, where Dr. Nichlos Dicuccio graciously cleaned and sutured the wound. So there's at least one bear that was better off after being trapped than before. —WCO John Hancock, Lock Haven.

### One's Not Directly to Blame

**LYCOMING COUNTY**—I was traveling on the Williamsport bypass when I saw a ball of paper bounce along the road. Because there were no vehicles in front of me, I figured somebody was over the bank. But when I looked in the rear view mirror I noticed a crow sitting on a pole, above the paper. It's bad enough dealing with inconsiderate people who litter, but dealing with wayward crows is strictly for the birds. —WCO Dennis Dusza, Williamsport.



## Good Project

**TRAINING SCHOOL**—If you're suffering from winter doldrums, consider building artificial wildlife nesting structures. Various boxes have been designed for bluebirds, waterfowl, hawks and owls, even bats. So, guys and gals, grab your saw, hammer and nails, and get busy.—Trainee Keith A. Snyder.



## Slight Disagreement

**MONTGOMERY COUNTY**—I was manning an exhibit when Wayne Campbell told me of an unusual sighting. He noticed a great horned owl struggling to get airborne with a rabbit. On a closer look he noticed that a raccoon was on the other end of the rabbit, trying to take it from the owl. After a few moments the hooter made off with its meal.—WCO William Wasserman, Montgomeryville.

## Fast Foods

My grandfather started feeding peanuts and seeds to a chipmunk. Then one day he placed three peach pits at the foot of his favorite lawn chair, and the chipmunk quickly took his offering. The next day, however, the pits were back, lined up neatly beside the chair. Puzzled at first, Pap thought maybe the animal needed help cracking them. Sure enough, the chippy reclaimed his peach pits as soon as they were processed.—Forest Technician Don C. Stiffler, Ligonier.

## Only One Way to Go

**CLARION COUNTY**—While doing my monthly reports it struck me that I had just completed my worst month as a wildlife conservation officer. I got four flat tires, and once got stuck and had to get a tow; I picked up a roadkilled bear that wasn't dead, and he ended up getting more of me than I did of him; I removed a bridge that I shouldn't have and had to build a new one; and for recreation I went to a car race only to get hit in the head by a flying rock that knocked me silly for a while. Thanks to my fellow officers, I'll never forget most of these incidents, and like they say, "It can't get any worse than this."—WCO Jim Egley, Knox.

## Unusual Furbearer

**SCHUYLKILL COUNTY**—A survey of fur dealers and taxidermists indicates not only that coyotes are getting fairly well established here, but also that sportsmen are starting to take full advantage of the opportunities the animals are providing.—WCO John C. Shutkufski



## Grouchy Neighbor

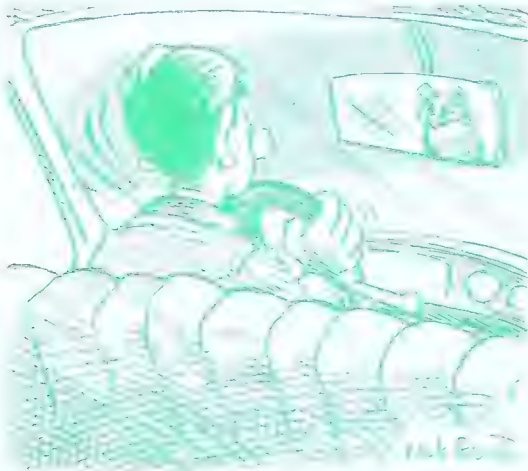
**POTTER COUNTY**—It seems a certain bear has something against bluebirds. After the food and cover crew erected bluebird boxes along a pipeline on SGL 208, a bear came along and tore down and crushed every one of them.—WCO Ron Clouser, Galeton.

## Fine Support

**SCHUYLKILL COUNTY**—I'd like to say thanks to the Zion Grove Hunting Club, Ringtown Valley Sporting Club and the Shenandoah Fish and Game Protective Association for providing the food and doing all the cooking for the Mt. Zion hunter-trapper education class. Such cooperation spells the difference between a good class and a great class; and judging by the size of the Mt. Zion class, it's a fabulous one. Thanks, guys. — WCO John Denchak, Tamaqua.

## Back in Class

**TRAINING SCHOOL**—Happy New Year from the Training School. We hope your past hunting season is filled with many fond memories and that the upcoming ones will be even better. — Trainee John A. Morack.



## Going for a Ride

**CAMBRIA COUNTY**—My cousin was driving home around midnight when he saw a large bird flash by his car. He thought he may have struck the bird, but he found no signs of a hit. The next day he drove off to the store, however, and was surprised to find a great horned owl perched on the backseat. The bird seemed to be enjoying the ride so much that he didn't want to leave the vehicle. Maybe he just wanted to be chauffeured around for a while. — WCO Lawrence A. Olsavsky, Colver.

## Sure Is

**WESTMORELAND COUNTY**—After a hunter-trapper education class Deputy Dave Keck commented on how many women had attended. We checked the roster and found that 37 percent of the students were female. I think it's great that so many girls are getting involved in the sports. — WCO Dennis L. Neideigh, Greensburg.

## Just Step Outside

**ELK COUNTY**—A good way to make the winter months seem shorter and the hunting seasons longer is to spend more time outdoors. With snow on the ground, it's easy to find where deer, turkey and other wildlife are living, and you don't have to worry as much about getting lost because you can always retrace your tracks. Winter also is a good time to perfect your photography skills. — WCO Dick Bodenhorn, Ridgway.

## Don't Wait

WCO John Denchak and I spent an entire day gathering evidence and issuing warrants after somebody killed a bear in archery season. We apprehended the guilty party, but the key to the entire investigation was a timely report by a concerned sportsman. There's nothing more frustrating than learning of a violation several weeks or months after it occurred. — LMO Stephen L. Opet, Tamaqua.

## Enterprising

The recycling programs starting in communities throughout the state will certainly help alleviate our solid waste disposal problem. Another benefit is that "trash" has value. On several occasions I've seen aluminum cans and glass bottles littering roadsides and, almost without fail, they were picked up within days by entrepreneurs getting cash for trash. — LMO Barry S. Zaffuto, Ebensburg.



# Working Together for Wildlife, 1989

The white-tailed deer is this year's featured species in the Game Commission's Working Together for Wildlife program. "Last Glance," by Jack Paluh, featured on this month's cover, was selected from paintings submitted by 24 Pennsylvania artists as this year's WTFW fine art print.

Collectible embroidered patches and decals like the one shown here are also available through WTFW.

The white-tailed deer follows the snowy egret, elk, kestrel, bobcat, bluebirds, river otter and osprey as WTFW featured species.

Since WTFW was launched a decade ago—the collectible patches weren't offered until 1982, and fine art prints until 1983—much has been done to help many species of wildlife in Pennsylvania.

Ospreys, 1982's featured species, were only migrants in the state at that time. Since then, however, thanks largely to reintroduction attempts by researchers at East Stroudsburg University, the fish hawk once again ranks among Pennsylvania's breeding birds.

River otters, featured in 1983, were confined to the Poconos, but they have now become established in several Northcentral Region waterways due to successful trap and transfer efforts made possible through WTFW.

Bobcats, featured in 1985, were once nearly gone from the state, but their numbers are increasing today, and many



**THE WHITE-TAILED DEER** is the eighth species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for non-game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patches of the snowy egret, bluebird, bobcat, kestrel and elk are still available; those of the osprey and river otter are sold out. Decals (\$1 each) are available for all but the egret and deer. Order from the Game Commission, Department AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.

people have learned to appreciate this rare feline through WTFW.

These are but a few noteworthy examples of what is being done through WTFW, made possible through public support and involvement.

Jack Paluh, Waterford, ranks among the state's finest wildlife artists. His *Mountain Music—Spring Gobbler* was featured as the 1986 Pennsylvania Conservation Print, published by the National Wild Turkey Federation. He was recognized as the 1986 Artist of the Year by the Minnesota Deer Association, and he also produced the Pennsylvania Deer Association's 1987 Conservation Print.

As in past years, an issue of 600 signed and numbered full color prints are being produced. Image size is approximately 15 x 22½ inches on acid-free 100 percent rag paper. Price is \$125, delivered. Add \$97.50 if you want it framed. Order from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.



# Pennsylvania Game Commission Retirees



**ADAM HODA**  
Equipment Operator  
White Haven  
3-16-53 — 4-1-88



**BETTY J. ASHENFELDER**  
Game News Circulation  
Marysville  
11-18-68 — 6-24-88



**HAROLD E. HASS**  
Labor Foreman  
Germansville  
9-5-55 — 6-24-88



**GLENN E. MILLER**  
Labor Forman  
New Castle  
4-11-67 — 2-19-88



**JOHN E. GREIS**  
Labor Foreman  
Kutztown  
1-16-61 — 1-8-88



**GLENN E. McDANNELL**  
Labor Foreman  
Gettysburg  
3-26-68 — 5-11-88

In addition to those pictured, the following employees also recently retired, but their pictures were not available. Manuel H. Ennis, Labor Foreman, Adamsville, 11-30-60 — 2-19-88; Ruth N. Holquist, Clerical Supervisor, Oil City, 4-4-67 — 10-28-88; Emory R. Kaub, Equipment Operator, Hawley, 2-27-68 — 6-24-88; John R. Milosh, Laborer, Conneaut Lake, 1979-1989; Albert O. Mock, Surveyor, Woodbury, 4-5-65 — 12-23-88; David P. Saxer, Laborer, Wyalusing, 1965-1988; Earl L. Shappell, Laborer, Hamburg, 9-15-64 — 12-30-88; and Dorsey R. Smith, Game Land Officer Manager, Mechanicsburg, 3-62 — 4-88.





**CROSS COUNTRY SKIING** is a great way to explore fields and forests in winter. Getting started today is simpler than ever. Ski shops and rentals are appearing everywhere, and steep terrain isn't necessary.

## Sliding Along

**F**OR MANY years the only way to get "back in" on a favorite Game Lands, once the snow fell, was by rubber boot or snowshoe. I always found those options boring. Boots are slow and snowshoes cumbersome. I needed a way to cover the snowy ground that was faster and more fun. Then I discovered cross country skiing.

But you're a hunter, you say, not a skier. Lodges and funny tassel caps and going downhill real fast are not your style. They're not mine, either, but I do cross country ski. You see, once the hunting seasons are over, I still haven't had enough. I can't quit the outdoors "cold turkey" when I'm enjoying it so. I might not be able to take a gun or bow along, but I still like the scenery and I still enjoy seeing what wildlife is up to, during this intriguing time of year.

Full winter, with its sunlit snow sparkling diamonds and its deep blue shadows, its traces of deer hooves

and grouse wings on the whiteness, shouldn't be missed. There are too many paths and forest trails that beckon, "Come see what I have to show you now." Cross country skiing lets me travel them at jogging speed, without the jarring effort. It's an easy gait, a swinging glide that eats up the miles and makes cheeks rosy. It's certainly preferable to the couch and TV until spring.

Interested? Getting started today is simpler than ever. Cross country ski

**Another  
View...**

**by Linda Steiner**

shops and rentals are appearing everywhere, even in non-downhill areas. Steep terrain isn't needed for this sport, just flat or gently rolling. Cross country isn't expensive, either. Typical rentals are \$2 to \$4 an hour and medium quality, practical and serviceable equipment will run around \$150.

It's best to rent equipment for your first time out, though, like me, you'll soon want to own your own for the go anywhere anytime convenience. As in buying any sporting goods, unless you're an expert yourself, make the purchase from a pro who understands the equipment and your needs and can give you some basic instruction. Like buying a bow or gun, it's important for ski gear to fit you properly. Skis are sized to your height and weight, the correct length determined by a chart or your dealer's expertise, or what, after a few rentals, you feel works best for you.

One aspect of cross country skiing that I liked right from the start was its simplicity. I didn't need much new equipment. In fact, as for clothing, as a hunter I already had what I needed. To ski I dress as if I'll be hiking into the

deer woods and yet can bundle up once I reach my stand. That means layers I can open as I exercise, but can close to keep warm if I stop or the weather changes. The only caution I have for a skier is to avoid bulk or tightness because there's a lot of body movement in the sport. You probably already have a fanny pack or daypack to carry along incidentals or to stow your "one sweater too much." Later on you might want leg gaiters, knickers, a wool skiing sweater and even a funny tassel cap, but they're not essentials.

There are only three new pieces, or rather pairs, of equipment you will need. These are skis with bindings (a snap that attaches the ski to a flange at the front of the ski shoe), ski shoes or boots (which resemble leather joggers or hikers), and poles. That's it. You will probably be using waxless skis. These are the most popular, performing well and yet very simple. There's no need to learn waxing techniques or take the time to do it. As there are longbow and recurve bow traditionalists, there are skiers who prefer wood or waxable, but these are more bother.



GEORGE LAVANISH's *Kestrel*, the painting used for the cover of the Game Commission's *Birds of Pennsylvania*, is now available in fine art prints from the artist. The full color prints are printed on 100 percent rag paper. The edition is limited to 300 signed and numbered 11 x 16 prints. Each print, unframed, is \$85, delivered (PA residents add 6 percent). Order from George LaVanish, R.D. 1, Box 73, Warriors Mark, PA 16877.



Before you ski it might help to understand a little of what makes a cross country or Nordic style ski work, as opposed to downhill or Alpine. Cross country skis are long, narrow, have a rough pattern on the middle bottom, and a bend, called a camber. This bend flexes as you ski, giving your strides more power. The rough pattern grips and lets you push against the snow with one foot, as you glide forward on the other. Since most skis are built like a bow limb, fiberglass laminated to wood, correct storage is important. To avoid losing the camber or twisting them, don't stack the skis in a corner or store them flat on their bottoms. I keep mine slightly elevated on wood blocks on their side.

After the equipment comes the fun part, skiing. It really is true that if you can walk, you can cross country ski. If you have ever walked along swinging your arms, or hiked with a walking stick, you already have the gait of cross country skiing. To get started, glide forward on the right ski as you push off with the left, planting the left ski pole. Then the left ski and right ski pole and so on. You might shuffle at first, but in a little while your kicks will get better, your glides longer.

To slow down or stop, glide with your skis side by side and drag your poles in the snow, or snowplow, angling your ski tips toward each other to make a "V" as you skid to a halt. Don't grab a tree. You can steer by changing weight from ski to ski or picking up the lead ski and heading it off in the new direction. It may sound confusing, but all this maneuvering will come naturally.

Don't be ashamed to fall down. Everyone falls, some of us more than others. In fact, when I first asked experienced skiers how I should turn or stop, they said the easiest way was to fall down. I could always get up and start again. Snow is soft. If you keep relaxed and ski with your knees slightly bent, you shouldn't fall. Don't ski like a stiff toy soldier or you'll be sure to go down, and probably get hurt. Better balance comes with practice.

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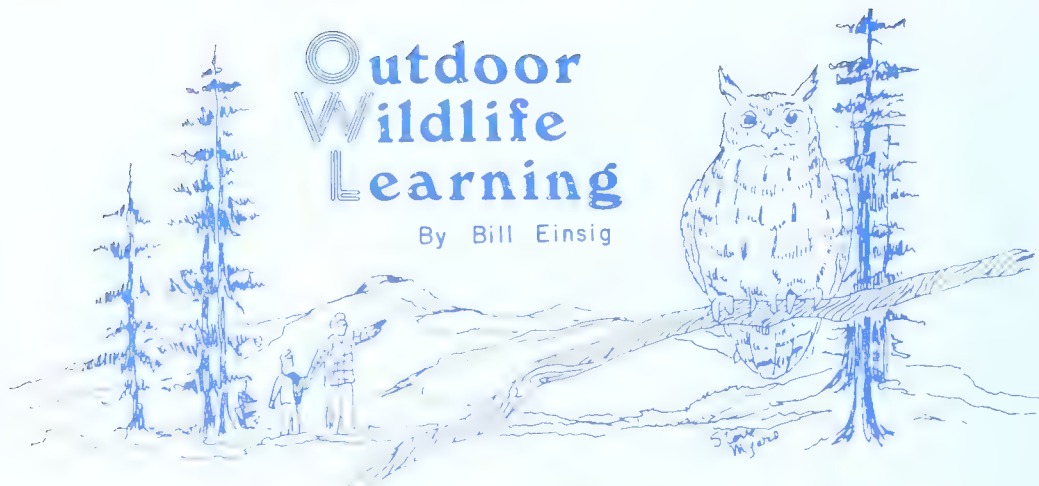
**GAME NEWS**

For a Friend . . .

At first you may want to ski only those trails that are flat, but you'll quickly be looking for those downhill rides. You'll find yourself squatting low and pushing with your poles to go faster, or snowplowing for control. You can ski uphill, too, by walking or kicking harder so the tread on the skis grip. Or you can side-step up. Ski within your abilities and remember, if the downhill or uphill look too steep for you, a washout bars the way, or you just want to see something interesting off the trail, you can always unsnap your bindings, pick up the skis, and walk.

I find good places to ski while I'm hunting and vice versa. The speed of skiing lets me check out new terrain that I might want to return to next hunting season. Conversely, when I'm afield in the fall, I consider the paths I walk for their suitability for winter skiing. On Game Lands, State Forest Lands and National Forests, the cross country possibilities are endless. Maps are available from the appropriate agencies that detail trails and roadways where skiing is allowed. Many state and county parks have developed cross country ski trails which are kept open and groomed. Other skiing paths could be power lines, gas lines, or abandoned railroad rights of way. Even skiing open fields is fun.

Some of my most frequent cross country companions are hunting and shooting sportsmen who never dreamed they'd be skiers. But they've found it to be a complementary sport. I know it's something I expect to be doing for a long time. I have hope because of the elderly gal I passed on the trail the other day. She wasn't setting any overland speed records, but she was still skiing and smiling. That's the way I want to be.



## An Ideal Subject

**I**F ASKED to vote for the most valuable classroom animal, my vote would go to the ubiquitous killdeer. But that's not a classroom animal, you might say. True, but, in my opinion, the killdeer is far more interesting and useful than any caged mouse, snake, gerbil, rabbit or ferret.

First, the killdeer is a wild animal, free to move around the schoolyard as it pleases. Caged animals, for the most part, sit and stare in frozen stupor or run out of sight in some private hiding place.

The killdeer can go anywhere. It's free! The nesting killdeer moves about the lawn looking for food, but always returns to the nesting area, usually in full sight of the class. Its instinctive behavior ties it to a territory that my class can easily observe and study.

Secondly, the killdeer is a patient, and long-suffering performer. It will repeatedly defend its stony nest without flying off in total abandonment. When intruders leave, the killdeer quickly returns.

For several years a pair of killdeer made a nest each spring somewhere on our school campus. At first they chose the gravel service road behind our building. Then, when that road was paved, they moved the nest site to the rocky berm of the main driveway.

The nest, and it's really stretching the meaning of the word to call it a true nest, was nothing more than a slightly concave area in loose stones. But each year it held two to four perfectly camouflaged eggs within several feet of the busy roadway.

We used that pair of killdeer and their nest to study animal behavior in ways we could not have done with caged animals. At some distance from the nest, our class would join hands and form a long arc with

the brooding bird and its nest at the center. In unison, the class would step slowly toward the nest.

With each step, the adult killdeer reached a new stage of readiness. The bird first became alert and turned to face us. Then, as our steps grew closer, the bird spread and lowered its wings. They covered the eggs and the bird looked ready to fiercely defend its eggs. One more step. The wings folded back and the bird stood uncertain now that her show of force failed to stop the advance of this many-legged creature. One more step. The bird became noticeably excited and seemed to search for some available escape route.

Finally, one last step took us beyond some invisible boundary. In a last-ditch effort to save the eggs, the killdeer struggled from the nest, dragging what looked like a broken wing. With piercing cries, she hobbled off to the other side of the road.

It seemed as though we could have caught the bird with our hands. In fact, some youngsters would have gone after it if only to nurse it back to good health. When we didn't move after her, the mother stopped at a safe distance to watch us.

When the adult finally left the nest, our youngsters were close enough to see the nest site and the spotted eggs. We didn't invade the nest area and, as we quietly withdrew, the killdeer returned to the nest.

Later in the same day, and again the next, we took another class to the nest to watch a repeat performance. The brooding bird always seemed to respond in a predictable sequence as our group drew closer to her nest and eggs. It appeared to be staged just for us, and I'm certain some students may have wondered in amazement how we could so thoroughly train this



bird to do what we wanted.

The nesting killdeer provided a natural learning activity that brought youngsters in direct contact with an animal that was wild and free. In a sense, they explored the animal's life on equal terms—not through the bars of a cage.

If we truly expect to educate anyone about the need to understand and wisely manage wildlife, we must first know what wildlife is and what it is not. They must somehow experience the thrill of seeing wildlife in the wild. All the clever classroom activities cannot replace the real experience of seeing a fat groundhog wobble to its hole or watching a gray squirrel flatten against a tree trunk or watch a red fox scurry across your path.

Opportunities to observe and study wild critters are all around us. Why do most of us do so little of it?

## A to Z

*Art to Zoo* is a tabloid published for teachers by the Smithsonian Institution and distributed free of charge to all teachers who request it.

The October 1988 issue of *Art to Zoo* focused entirely on the destruction of tropical rain forests. Most of the eight-page paper provided a basic background on rain forest structure and ecology with good examples of many niches and the species that fill them.

The paper is definitely content-oriented, not activity-oriented. That's significant to me because the problems of rain forests are still new to most of us and we need solid understanding of the issue before we introduce it to our students.



There are some teaching ideas intended to guide teachers in discussing rain forest problems but there are not pages of pencil-and-paper activities so common in modern curriculum materials. That's refreshingly different. I don't object to activity pages, I just believe adequate teacher understanding is more important and should never be assumed.

*Art to Zoo* is published four times during the school year. The Smithsonian will send four copies of each issue to each teacher on the mailing list. Extra copies can be passed on to other interested teachers or used in creating bulletin boards, learning stations or research reports.

To get on the mailing list, contact *Art to Zoo*, Office of Elementary and Secondary Education, Arts and Industries Building, Room 1163, Smithsonian Institution, Washington, DC 20560.

Your letter does not need to be on official school letterhead but *Art to Zoo* will be mailed only to the school address. Therefore, be certain you include your school name and address.

## State Deer and Bear Scoring Program Slated for April

The Pennsylvania Game Commission will be conducting official deer and bear measuring sessions this coming April at our six region offices. Only deer and bear taken in Pennsylvania are eligible. Measurements will be taken by certified Boone & Crockett scorers and entered among the agency's official records. Scoring sessions will be held from 9 a.m. to 3 p.m. on: April 9 at the Northwest Region Office, three miles south of Franklin on Route 8; April 8 at the Southwest Region Office, 339 W. Main St., Ligonier; April 9 at the Northcentral Region Office, two miles south of Jersey Shore on Route 44; April 9 at the Southcentral Region Office, one mile west of Huntingdon on Route 22; April 8 at the Northeast Region Office, at the intersections of Routes 415 and 118, Dallas; and on April 23 at the Southeast Region Office, seven miles north of Reading, one mile off Route 222 on Snyder Road.

## LOOKING

## Backward



**By Jack Weaver**

Wildlife Conservation Officer  
Centre County

**I**T'S JANUARY. For the new class of trainees reporting back to school after Christmas vacation, it's a time for writing critiques and reports about their field assignments this past hunting season. That got me to thinking back some 20 years and reminiscing about my own beginnings with the Game Commission. There was probably never a more naive rookie to roll into a seasoned game protector's driveway for field assignment than I. I had just turned 24 and, unlike many of my colleagues, I was not a deputy prior to attending the training school. In fact, I honestly didn't know there were two separate agencies for game and fish. I'd never even seen a game protector in full uniform, much less known for sure what they did. I just knew I wanted to be one because I liked to hunt and fish. The job sounded like a real adventure. Well, it was to turn out to be an adventure all right, or misadventure, for the first game protector I was assigned to.

It was one of those crystal clear October days in 1968 when I turned off of I-80 and onto the Conyngham exit in Luzerne County. I was both excited and apprehensive. I had met Bob Nolf earlier that day, at the Northeast Region Office in Dallas, and had followed him home. Like all Game Commission people I was to meet over the years, Bob was warm and friendly. Yep, I'm talking about game protectors here—

and their families. Conservation officers, as we're called now, always try to handle even the worst offenders courteously and professionally. And this is even more true today than it was 20 years ago. It's just that to do our job we are required to maintain control of whatever unpleasant situation we may be in. And to do that sometimes means getting tough. You'll see what I mean.

Bob wasted no time getting me involved in a game protector's routine. Not that there's anything even remotely routine about it. We picked up roadkilled deer, contacted farmers, scheduled and attended meetings, investigated violations, and handled a variety of wildlife complaints. But I had yet to make my first arrest. I was anxious and needed to get the edge off, like a hunter anxious to shoot his first deer. After all, I was a game protector, wasn't I? Well, trainee anyway. Early small game season came and went. We patrolled and checked hunters, but no violations. Oh, they were going on all right; that's what was so frustrating. We sneaked into a duck marsh where late shooting had been reported, for example, only to hear the muffled report of gunfire at some distant pond. We had reports of violations, but not enough information to even interview a suspect. Even Bob and his deputies were getting edgy.

"It just isn't normal," he kept telling me. "Wait until the first day of pheasant season."

But the first day of general small game season came and went, and still no violations. Meanwhile, we were extending ourselves into the night, and that is where my inexperience really showed. Night patrol is much different than daytime law enforcement. Stealth and cunning are often necessary to slip into an area undetected. After all, who would jacklight a deer if they knew the game protector was watching? Well, we had some hot tips about gangs jacking deer in a couple of areas. So one night Bob eased his car into position where we could watch one of the suspects' homes. Sneaking in the last quarter mile, we were able to get close enough to see what was going on. But everything was quiet.

After a while it seemed as if we were a normal part of the scenery—like we were supposed to be there. Such complacency, however, can lead to carelessness. It's impossible to sit in a car and drink coffee for hours without getting out occasionally,



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## GAME NEWS

For a Friend . . .

especially for a rookie. Bob had just been issued a new car and the dome light switches along the door panels hadn't yet been disconnected. I, however, thinking only of the urgency of my calling, casually opened the door. The car's interior lit up, and Bob, despite the shocked look on his face, looked splendid sitting there in his Stetson. Startled by the bright flood of light from inside the car and Bob yelling, "Shut the door! Shut the door!" I bolted, closing it as swiftly as I could. Slam. The noise echoed resonantly off the house we were watching. A porch light came on; a dog barked.

"Get in! Get in!" Bob yelled. I opened the door again—those Stetsons do look impressive at night.

Bob was frantic now. "Shut the door! Shut the door!" he screamed. I did. Quickly, too! Slam! Well, I was excited by then. Somebody yelled, the dog sounded closer, the engine roared, and we headed back to Conyngham with Bob mumbling something into his chin strap about crawling through car windows and inexperienced trainees. I was physically beginning to adapt to my new career, however; I didn't have to get out of the car one more time before we got home.

Several nights later found us parked on a gasline overlooking a field. Bob explained that he had reports of jacklighting going on in the field below. It was a dark night but fairly warm, so we stood outside the car. A long time passed and nothing happened. Finally a vehicle approached the field below. It pulled into the field, sweeping the area with its headlights as it did so. Several deer could be seen before the car stopped and shut off its lights.

Excitement began to mount. Were these the jacklighters? We watched their dome light come on and someone get out. Those dome lights really are bright, I thought. Bob peered intently through his binoculars. Then a spotlight lanced out, probing the blackness toward the deer. In the excitement I jammed my flashlight, or rather Bob's flashlight (nobody told me to bring one along when I left the school) in my back pocket. I began to edge closer to our car, just in case.

I heard Bob whisper, "They're gonna shoot!" Then we heard a yell from the field, the spotlight went out, the dome light came on briefly, the door slammed, and the car's taillights disappeared up the road.

"They were gonna shoot!" Bob ex-

claimed "What happ . . . ?" As he turned toward me he began to yell unprintable things.

My mouth dropped open. "What?" I asked.

"Your flashlight!" Bob yelled. "It's on!" Sure enough. Apparently when I shoved it into my hip pocket the switch accidentally came on. The beam was spearing proudly into the night sky.

"Get in," Bob said. "We're going after them."

Soon we were down in the field. Bob checked it over quickly, thinking they may have killed a deer earlier and were planning to pick it up. We didn't see any so we hurried out in the direction that the tail-lights had disappeared. Soon we saw a vehicle coming toward us, and Bob decided to stop it to see if it was them coming back. Wow, my first vehicle stop, I thought. I got a grip on myself and was determined to make no slip ups.

Bob had instructed me beforehand on what I was to do should we have to stop a car. We didn't have flashing red lights back then. Instead we used a hand-held spotlight with the words "Police Stop" painted over the red lens. Of course, no one could read those words while staring into the bright red beam. At the other end of about 14 feet of cord, piled loosely on the floor around my feet, was a plug for the cigarette lighter. My job was to point the spotlight at the vehicle we wanted to stop and turn it on. Simple enough.

As the car came closer I began to frantically root through the pile of cord for the plug. Bob stopped our car and turned the four-way flashers and dome light on. He wanted them to know we were officers. Bob started to get out, and I thought I'd better, too. The other car had slowed down considerably by the time I gracefully leaped out with the red spotlight in hand. Unfortunately, my feet had become tangled in the spotlight's cord, and I went tumbling head over heels into the ditch. The guy in the other car jumped out and ran over to help me up. He wasn't who we

were after. Bob just stood there, shaking his Stetsoned head, while I slunk back to the car. I would rather have crawled under the seat and into the trunk. Well, it was another silent trip to Conyngham—with no pit stops on the way, either.

Shortly after that I changed assignments from Luzerne County to Monroe County, where I went to work with DGP Ernie Taylor. It was there that I heard my first shots at night—lots of them. We even threw some poachers in jail one night. Then one day Ernie got some information that certain people had some illegal venison at their homes. A search warrant

would be needed. Whew, heavy stuff for a rookie, I thought.

Two places had to be searched simultaneously, so Ernie lined up some other officers to help. One of those officers was the retired game protector Ernie had replaced. His name was Spencer. He was short and weathered looking. He had been a game protector since before the training school was even in existence. His face, bristling with silver whiskers, reminded me of a cross between a silver-tipped grizzly and Popeye. When introduced he gave me one of those drill instructor glares that sizes you up and

## Fun Games

### WINTER IS FOR THE BIRDS

By Connie Mertz

Unscramble these words to discover what birds may be visiting your feeder this winter.

1. ERNHNOTR DACIRLNA

\_\_\_\_\_

2. GEVIENN BREOGASK

\_\_\_\_\_

3. HTIEW-ATRTODHE WRSAPOR

\_\_\_\_\_

4. FETTUD MITTSOUE

\_\_\_\_\_

5. LEUB AYJ

\_\_\_\_\_

6. LEPPRU HIFNC

\_\_\_\_\_

7. REAMNCIA LIFONGCDH

\_\_\_\_\_

BONUS: A good food for these wintering birds would be:

FESULONWR DESES

\_\_\_\_\_

Answers on page 64



then dismisses you all in one glance. Then Ernie did it.

"Spencer," he said "you take Weaver and a deputy and search one place. We'll go to the other. And don't let the trainee get in trouble."

"I'll take care of him all right," Spencer said, giving me a penetrating look that sent chills up my spine.

All to soon I found myself facing a battered door on a run-down tenement in what wasn't exactly the best neighborhood in town. In fact, it wasn't the nicest town around. Spencer gave me the warrant and told me to read it to whoever opened the door. I was real nervous, so I took a deep breath and then banged on the door.

I don't know what I was expecting. Hoping a child would answer, I guess. But I certainly wasn't prepared for what opened that door. She was the biggest, meanest looking woman I ever saw in my life. She stood about five foot ten and was nearly as big around. She probably hadn't seen her toes in 20 years. There she stood, hands on her hips. "What do you want?" she growled.

"I got a search warrant." I croaked.

"So?"

A rumbling from behind me said, "Just read it to her, boy."

I felt like I was trapped between two mad dogs. I got the papers out and leaned against the door post so I could steady myself enough to read them. (Reading helped.) My voice went from a croak to a high soprano. When I finished I looked up, hoping she had fainted. She hadn't. She just stood there, seemingly as immovable as a Sherman tank.

"You ain't comin' in," She growled. Boy, was I glad.

"But, but . . ." I never finished. All of a sudden Spencer was standing between me and the monster. She stood a full head taller than he, and for one terrible moment I thought she was going to bite his off.

A gnarled finger came up under her nose and Spencer, sighting along his finger, firmly said, "Now look here, lady, we're game wardens, we have a search warrant, and we're gonna search your place, see? So you and your husband just sit down and be quiet."

They sat, but she continued to glare



defiantly at Spencer, who stood there glaring right back. Man, I thought, what am I gonna do if they tear into each other.

"Go check the freezer, boy," Spencer said, never taking his eyes off the Sherman tank. I hurried to obey, before she could attack, because I knew we were all in trouble if she did. Fortunately, she didn't, and we finished our search without any further problems.

See what I mean about having to be tough sometimes? Although this account may be somewhat humorous the next one was much more serious. It happened on my next field assignment in Venango County with DGP Lorraine Yocum, Pud for short. I stood dumbfounded when a husband, facing officers with a search warrant, yelled to his wife to bring a gun. She grabbed a rifle off the rack. But, before she could cross the room to her husband, Pud, in the rather authoritative voice for which he is somewhat famous, made it perfectly clear that any such gun play would, in the very least, be very foolish. She turned slowly around, hung the gun back on the rack, and then collapsed in tears on the couch.

Yes, we had some adventures and these are just a few. Handling the unusual became a way of life. But without the hands-on training of these field assignments some of us may not have survived our first district.

Next month I'll share some adventures trying to catch beaver poachers in my second district, in Tioga County. Later, after beaver season, we'll jump back to some stories from my first district, in Berks County, and then to my present assignment in Centre County. I like to move around.

# Thornapples



Chuck Fergus

## The First Day

The four gray does drift past. A fifth deer hangs back. We wait, the deer and I, until it starts up again, trotting, closer now, its coat lit yellow by the dawn. I ease the rifle up. A buck: a yearling with spike antlers, spindly points too short to make him legal, and, in any case, too short for me to end my season on, on the very day it has begun.

Ears pricked, the yearling trots past.

Shots sound on my right and, farther away, on my left. The four does and the yearling come sneaking back. Soon the crunching of leaves precedes a man clad in orange. He doesn't seem to notice me leaning against my tree, and marches on past.

Today I hear fewer shots than on any opening day in memory. Maybe the cold wind buffeting out of the north has sent the hunters back to their cars and cabins; I know I'm not hunting well today, in motion most of the afternoon just to keep warm.

## Tuesday

At dawn it's so cold that the truck shatters yesterday's puddles into inch-thick shards of ice. In the woods the leaves are frozen, and every twig is a glass rod waiting to snap. Too noisy to walk, too cold to stand; I make a big loop through the woods while my partner waits, and feel guilty walking while he's shivering in the cold. We see no deer on this short drive and none on the next.

In late morning we pack up and leave camp; on the way home we stop and hunt a pristine wooded valley where, in other seasons, I have found drumming grouse, native trout, and barred owls who screamed their intricate, lunatic question: *Who cooks for you? Who cooks for you-all?* The sky is deep blue, the wind bitter. On an old logging skid I spend the afternoon relearning how to hunt: take a few slow paces, stop, watch until the cold demands motion; take a few more short, considered steps (coming down on the outside edge of the boot, then gingerly settling the sole), stop, and watch, moving only the eyes. I hunt halfway up the mountain, stand for a cold hour, and hunt back down. No deer, not even a tail.

## Wednesday

The trees of home come up black against the sky. A crooked hickory left by the loggers. A haggard pine. An oak that survived three straight gypsy moth years. I sit on a stump overlooking a brushy hollow. The air is frigid and so still that a footstep peals.

In the weeks before season I saw seven bucks within a mile of this place. One had a broad symmetrical rack. I watched him bedded tight in a thicket as my grouse hunting partner kicked toward him. The deer rose to a crouch; head down, invisible to my friend, he slunk away. The other bucks were driven by the rut. They wandered neck-swollen and grunting, practically oblivious to human scent, their noses to the ground as they hounded the does. I had a good look at one, a big-bodied buck whose rack carried four points on one beam, five on the other.

In the hollow, snow dusts the north-facing slope. From the clear south slope I glass with binoculars. I pick out two deer, a doe and a fawn browsing on the blackberry canes. In a connecting hollow, four orange dots disembark from a pickup. Voices carry to me. The doe and fawn swivel their heads. They amble off in the opposite direction, feeding as they go.

Now, with full light, I begin moving



slowly into the wind. Soon I am overtaken by a lone deer. The little buck fawn—antler nubs on his crown are circled by dark swirls of hair—feeds to within 30 feet. He sees my shape, stares, stamps a forefoot. He drops his head, then instantly snaps it back up: a ploy to make the unknown shape spook, the predator show his colors. The little deer goes through his routine amateurishly, as if he has already decided I am nothing more dangerous than a stump. Then he shakes his head and begins stripping dry leaves from a sapling with a dextrous pink-gray tongue.

### Thursday

After just three days of hunting it is natural to swivel the head rather than jerk it about; to breathe through the mouth so that air will not drag in the nostrils, impeding hearing; to see everything through a pale haze of breath.

Soon after dawn I spot six deer, two does and four young, then nothing else until late morning. I'm hunting around the head of a hollow when a doe trots past. Suddenly another deer joins her, angling in from behind some brush. I spot the glint of antlers, but the cover is so thick I can only glimpse the buck every now and then. I crane my neck, I crouch, but I cannot see through the briars and saplings. The leaves are noisy, and taking a step is out of the question. I do the only thing possible: I wait. An hour grinds past. I do not see the deer again.

In late afternoon I watch a squirrel working on his nest. He shreds the bark off a grapevine, stuffing his mouth with the whiskery strands. He totes the bundle away, but it's too bulky. Every few bounds he must stop and stuff all the loose ends back in. Finally he maneuvers the bark up a tree and into his nest. Maybe he felt it coming: in half an hour the flakes start to fall, tiny perfect crystals that glisten on my sleeve, my glove, the rifle's steel.

### Friday

Over three inches of new snow, shots ring out. *Crump* . . . a second of

silence . . . a low rumble as the sound plays itself out. A quick string of six: somebody with a pump gun flailing at a running deer. Then, from somewhere on the ridge, a muffled *boom* with the finality of a slammed door: a deer is dead.

I'm on the mountainside, moving into the wind, when three does come from behind and below me. Their hooves dip neatly into the snow. Out ahead they stop, then suddenly wheel and dash back. I wait. For a hunter, I suppose, but just maybe for a buck.

Branches clatter, and two round black ears appear above the hazel sprouts. The bear is small, probably a yearling—two years old in January—on his own now for the first time in his life. He pads along above me, and when he hits my scent he skids to a stop. He lifts his head and drinks air through flaring black nostrils. A minute passes. He sits in the snow and weaves his nose back and forth. Five minutes go by. I move my head to check the bench below, and when I look back the bear is gone.

From the mountain I see ridges smoky with cloud, brushy hills, and my own chimney sprouting a tendril of smoke. Above my head a mess of snow-capped sticks occupies a fork in a snag: an owl's nest. At dusk, the pair starts hooting back and forth, the female's voice deeper and more booming than the male's. In the middle of this ominous duet, and seemingly oblivious to it, five grouse flap into a nearby tree and





feed upon grapes in the vine-tangled crown.

### Saturday

A hinge squeaking—that's a blue jay. A clear vibrant *hrrongg*—a raven. Crossing the road I'm stopped by a man in a black Toyota pickup. He cranks down the window, "Ya see anything?"

Evenings, I'm so tired that all I want to do is sit and stare into the fire. The days, winding down toward the solstice, are short but full. They seem to rid me of preoccupation, of pettiness, of trivialities that film the mind. I'm cold and uncomfortable out there, cleaned out, emptied. I remember a Sun Dance I saw once on an Indian reservation in South Dakota. The Sioux men and women faced an ash tree they had cut and carried in from a grove along the river. They had trimmed the lower branches from the trunk and, in the center of a circle formed by an arbor of brush, erected the tree in a hole in the ground. The dancers stared into the green, wind-flickering leaves, where effigies hung—a buffalo and a man. Behind the leaves shone the holy searing sun. Shuffling in place, the dancers raised their arms and made a thin insistent piping through eagle-bone whistles. The smell of sage was everywhere—burning in a bucket, wafting from wreaths the dancers wore, blowing in on the wind. The dancers did not eat or drink. They danced for three days. Dancing somewhere beyond the place where pain existed, they emptied themselves, and something timeless and omnipresent and wholly of the earth—I

felt it myself, crouching under the brush arbor—came flowing in.

### Second Monday

Dawn finds me in a thicket where I customarily hunt grouse. All morning I sit, or stand, or take small, wakeful steps. Nothing. At noon I walk up the dirt township road. As if on cue, four deer bolt across the road in front of me. They cross an open weedfield, and I step off the road and look through the rifle's scope. The deer, still running, are hidden behind a slight rise. The last one, I think, had antlers.

At dusk I wait in a narrow draw that connects some logged land with the weedfield, to intercept a buck coming in to feed. In the last night, I am startled by a sudden snort and the thudding of hooves behind me. The deer—a loner, so maybe a buck—came not from the cover into the field, but from the field toward the brush. I shrug the rifle's sling onto my shoulder and head for home.

### Second Tuesday and Wednesday

I must work instead of hunt these days, at home on Tuesday and on Wednesday in town. All is clangor in the town—flashing colors, people who talk fast, angle-edged shapes hissing past. When I shut my eyes, what I see are straight, vertical trunks of aspen glowing gold in the sun; a red haze of huckleberry, slick green laurel, a brown back rising, a rack of antlers. God come down to earth.

### Second Thursday

Today, with the season quickly winding down, I find myself wondering why I'm fighting the cold and the loneliness, spending so much time and effort trying to kill a deer. It hits me that way when I bend and finger a crinkly white hair lying in a pressed-down spot in the snow.

I was working the steep of the mountain, trying to go quietly, but the concentration wasn't there. It seemed a sapling was forever whapping my leg, or the rubber sides of my boots were squelch-



ing together. I stopped to eat lunch where I could watch the bench, then decided to go a little farther, to sit on a fallen tree. Stones clacked under foot. I heard the laurel rattle and saw a white tail, a brown back, and—unless I conjured it up out of spite—a flash of antlers.

I let the white belly hair drift down into the vacated bed. If only I'd sat and waited. Maybe he would have gotten jittery and jumped up to take a look. Or tried to sneak down to the bench. I spread my square of sheepskin and sit in the buck's bed, which affords a nice view of the slope. I take a bite of sandwich, dull fare indeed.

### Second Friday

On this, the next-to-last day of the season, I decide, with a certain degree of petulance, to give up on stillhunting and to spend the day in a tree stand. The stand has been a lucky one: I've killed a buck from it each of the last three years.

A wet snow is falling when I climb the rungs. With dawn, I see old friends: the double white oak, the leaning hickory, the heart-shape patch of laurel, the old chestnut stump. I remember the bucks, where they stood when I shot, the way they clenched in on themselves and ran, how their bounding went splay-footed and jerky before they fell.

By noon the snow has turned to sleet.

Then it changes to freezing rain, then to bone-chilling rain. Bitterly I keep to the stand. Gray squirrels whip through the woods like windblown scarves; a mouse pops out of a snow tunnel and skitters across the icy crust. At dusk, two does walk past, heading for my meadow to feed.

### The Last Day

The night before, cold crept in—at dawn the mercury was 19 and falling. In my tree stand the wind makes my eyes smart, and snowflakes tickle my cheeks. I wear layers of wool and down, and vow to be stoic: other hunters are in the woods, and I will let them drive a deer to me. The hours pass. I sit. I think.

In Dakota, after the Sun Dance, I met a young Sioux, a college student working in a museum. He was a slim, erect man with high cheekbones and keen black eyes. I was standing before a painting of an antelope by the Sioux artist Oscar Howe. The student told me a little about Howe's life and his art. He looked at the antelope—it was running open-mouthed, its flanks bony, long legs tipped with jet hooves. The animals are better than we are, he said. They see and smell and hear so much better than we do, and they don't have any bad inside them. They don't hate each other. They don't kill, except for food. When we kill them—his eyes left the painting and met mine—when we eat them, we get



some of their goodness. Always we thank them.

The memory flees as the cold pries into my coat. My hands throb and my feet feel clamped in a vise. I climb down from the tree stand. The leaves are brittle and loud. The rifle feels better in my hands than it did across my lap.

On the logged land I pick up a rutted track, a road the woodcutters drive. In the tire tracks the mud is frozen; I walk there quietly. The sun, low in the west, is covered by clouds that are quickly whisked past. Wind whips up the hollow, and when it bites too fiercely I put my back to it and stand.

I check the ridge to my right, a briary rise shielded from the wind—it was here, weeks ago, that I saw the nine-point hot on the heels of a doe. I look for an antler, a foreleg, a horizontal back, the flick of ear or tail. I watch the slope on my left, another jumble of brush. It is there that I spot the deer. It trots around the point of the ridge, turns, and heads my way.

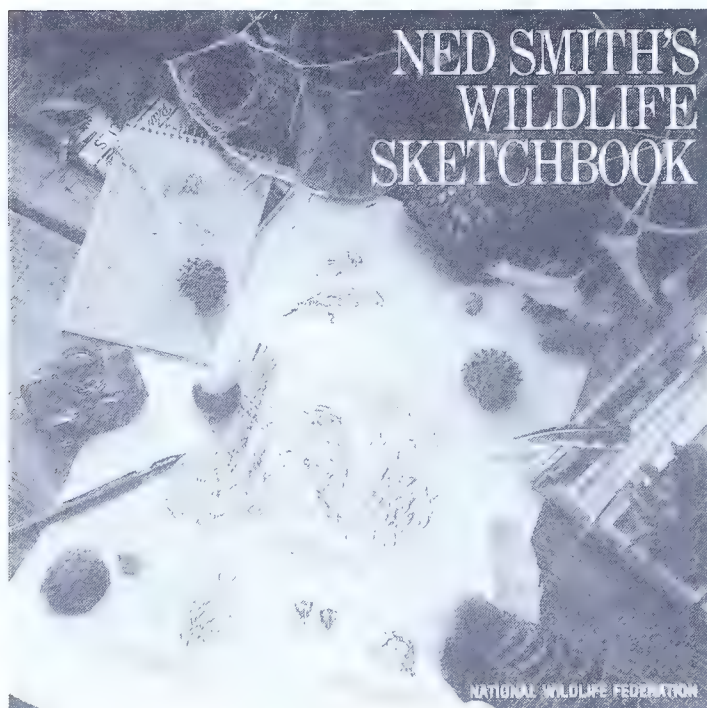
I sit in the snow. Through the scope I pick out the moving shape. The deer is a long way off but coming closer. Big in

the body, it has no noticeable rack. It keeps coming, though, and through a slice in the brush I glimpse antlers—long spikes.

He stops, screened by the brush. Then trots on again, more than 100 yards away, parallel to the logging road, even with me now, heading back the way I have come. The crosshairs slip ahead to an opening. The buck starts across, and I tighten on the trigger. With the shot, the deer picks up speed and I lose sight of him in the brush. I bolt a live round into the chamber and wade into the blackberry brush.

Fresh tracks in the snow are easy to find. I follow them to a small pile of gray-brown hair and a speck of blood. The tracks lead ahead through laurel and brush. They bunch, then splay, and I see the buck stretched out in the snow. His eyes, open, shine the green luminescence of death. I thank him for his life.

A slightly different version of this originally appeared in *County Journal*.



THE NATIONAL WILDLIFE FEDERATION has published *Ned Smith's Wildlife Sketchbook*, an outstanding natural history book featuring his illustrations and writings. Derived largely from columns Ned wrote for *National Wildlife*, the book follows wildlife through the year, season by season. Order from NWF, Books and Special Publications, 1412 Sixteenth St., N.W., Washington, D.C. 20036-2266. Price is \$12.20, delivered.





**LONG KNOWN** among deer hunters and other outdoorsmen for its red and black wool plaid, Woolrich has recently come out with a new camouflage pattern in a line of clothing hunters may wear in comfort regardless of the weather.

**158 years of Woolrich to . . .**

## Integrated Archery Apparel

**By Keith C. Schuyler**

**I**T WOULD likely take a great deal of searching to find an experienced nimrod who has not heard of Woolrich hunting apparel, products that have been available since 1830. Being a Pennsylvania company, and one that produces such quality that countless garments have been handed down for generations, this archer has long wondered why Woolrich was not more prominent in the bow hunting apparel market. Pennsylvania is the top bow-hunting state.

After all, wool is one of the quietest fabrics made when it comes to slipping quietly through the brush. And the traditional plaid red and black colors have probably fooled more state white-

tailed deer within gun-shooting distance than any other made.

And, it is warm.

That may have been part of the problem as far as bow hunters were concerned. October bowhunting season, with sometimes extended Indian Summer periods, but cool mornings and late afternoons, provides a mixture of temperatures that tests any fabric to maintain personal comfort. Of course, there are times during the late season after Christmas when any garments can be challenged to hold the heat. But archers generally get around this by adding sweaters or jackets underneath their camouflage suits.

And then there is this matter of

camouflage. Bow hunters traditionally have strived to conceal themselves from the quarry as well as other hunters. Although Woolrich red, and of more recent origin, green, plaid is passable from the standpoint of concealment, it doesn't hold the same appeal as camouflage patterns among today's archers.

Aside from all that, I have a suspicion that the Rich family, which has controlled the business from its inception in 1830, was reluctant to cater to those upstart archers who wanted to melt unseen into the landscape. After all, conventional Woolrich garments had been satisfying riflemen for many decades. Perhaps it was the eventual military use of camouflage—the company supplied products through eight wars—that influenced a change in thinking. Maybe



it was competition. Whatever it was, Woolrich was a late comer in developing archery apparel.

A letter from the late Fred Bear caused a flurry about ten years ago when he praised a jacket made in conventional plaid wool of dull autumn colors. Fred found it ideal for Alaskan temperatures and for concealment. Production was stepped up on that garment, but bombed—hardly encouragement for archery apparel at Woolrich.

Woolrich certainly is ideally located to experiment with what might catch the hunter's eye yet go unnoticed by deer. Nestled up against wooded hills of eastern Clinton County, the small town that takes its name from the company was ideally located between Lock Haven, the county seat, and Williamsport, once known as the lumber capital of the world. Among the company's first products were gloves and mittens with deerskin palms that provided warmth and a firm grip on the axes and saws used in the area's extensive lumbering operations. Hunters also liked them, and the business expanded to provide hunting coats and, eventually, a full complement of related garments. But, around the turn of the century, other products, such as shirts and bathing suits, took over 90 percent of the company's operation.

First started in a small building on Plum Run, still standing as a gift shop, the expanding business was moved to nearby Chatam Run to take advantage of greater water flow for manufacturing operations. Woolrich was one of the relatively few mills that survived competition and depressions while many mills failed throughout New England. Although modern machines and electric power are utilized today, there are three dams and wells on the company's 3200 acres that provide pure water for



**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by GAME NEWS readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from GAME NEWS office.



the mill and several small communities nearby. Much of the acreage provides excellent hunting and is open to employees.

Through the grapevine I learned that Woolrich, which only four years ago decided to enter the field of archery apparel, was coming out with a first for bow hunters. Consequently, I was delighted to accept an invitation to tour the home plant at Woolrich. Assurances were given that this column would be the first to publicly announce the Woolrich's new integrated archery apparel. It will be initially showcased at the SHOT (Shooting and Hunting Outdoor Trade) show at Houston, Texas, January 12 to 14, 1989.

There are combination hunting jackets offered by other clothing outlets, some of which are manufactured by the Woolrich company, but each must be purchased as a unit for all-weather hunting. The new integrated jackets under the Woolrich name can be purchased separately as desired and yet be combined into essentially one garment for the coldest conditions.

Consequently, my tour of the factory held special meaning and helped provide a feel for their products. The process from raw wool to finished garments takes some 11 steps, from machines that clean, spin and dye the wool, to weaving it into the familiar and new patterns that carry the Woolrich label. Some 5.2 million pounds of wool from American sheep growers are used annually. In addition wool is occasionally ordered from Australia and New Zealand to fill specific needs. For, blankets, furniture and wall panelling are among the products that adapt to the special properties of wool. Because wool is traditionally suited best for warmth, it is used in combination with other materials such as chamois, cotton, Thinsulate and Gortex.

**THE LIGHTWEIGHT jacket, modeled here by Dick Holcombe, can be worn by itself or, when the temperature drops, under a heavier coat or parka. Look carefully and you'll see the Woolrich name has been worked into the camouflage pattern.**

Michael Rich, a descendant of the founder, took me through the spacious plant. We stopped to chat with and get a photo of Dennis Tarr, superintendent of product development. The plant tour raised as many questions as it did answers, though, as at the time there was little going on concerning their new bowhunting apparel. After seeing the plant I was turned over to K. Alan Himes, senior vice president of marketing, for the archery story.

### What Extent

Why, when, and to what extent did hunting clothes for bow hunters enter the picture?

To set the stage, Mr. Himes reviewed the development of Woolrich from the time John Rich and Daniel McCormick started a company relationship that survived until 1845. A succession of Rich descendants and close relatives brought the business to what was considered a banner year in 1958. There were eight representatives in the garment division







alone, with approximately 50 styles—exclusively wool, of course—and most were designed for hunting utility. The company had four plants.

Today, there are 48 representatives, five Pennsylvania plants (Avis, Jersey Shore, Howard, Blanchard and Woolrich), two in Colorado, one in Nebraska, two in Georgia, and offices in Hong Kong and Canada. At one time plans were designed to hold employment at 300 people; today there are 2500. By 1984, however, production of hunting apparel, the original business mainstay, had dropped to a small percentage of total production.

Joseph Mangan, chairman of the hunting committee, was given a go-ahead to challenge the bowhunting market. He, along with Richard Holcombe, vice president of apparel sales and service, developed the Cam-WOOL-Flage unit in 1985. They strived to utilize wool as much as possible into all hunting fabrics. The following year, Shadowbark, a deciduous wood bark

**WOOLRICH** also manufactures outdoor clothing in the more conventional camouflage patterns, and they're combining wool with chamois, cotton, Thinsulate and Gortex to make good, functional clothing for all types of weather conditions.

pattern was developed that cleverly works in the Woolrich name. It can be stamped on wool, chamois or fleece which is in turn laminated to other fabrics.

Woolrich wasn't just in the archery clothing business, it soon was in it all the way. Now both the conventional and the Shadowbark garments can be worn singly, as two layers, or three layers, including a shell or parka in a color and pattern suited to either bow or gun hunting.

Today archers have a choice of: a light jacket and pants in green or tan camouflage, or Shadowbark, for days like the 80-degree weather of October 1 last year; a reversible cold weather jacket, which can be worn singly over the basic ripstop cotton jacket, or it can be zipped into a Gortex lined parka for sub-zero temperatures. The parka comes in Shadowbark, fluorescent orange, or camouflage fluorescent orange. Those who wish to cling to underlying garments of other makes can still cover up with the parka, or they can go all the way with Woolrich.

Modern fabrics and foreign competition have forced some changes in the manufacture of all-wool fabrics at Woolrich, but the end result has permitted the company to continue a tradition of providing garments to cover the hunting scene. But the familiar red and black plaid will continue to be available.

All wool.

(All fabrics beginning with capital letters are trademarked names)

## Use of Trophy Photographs

Following every hunting season, particularly those for deer, bear and turkey, we receive many photos from readers, showing themselves with their trophies. We are always interested in seeing these, and each year we publish some of them. However, we cannot acknowledge their receipt nor can we publish all of them, as we simply do not have the time nor space to do so.





**NOBODY** enjoys being battered black and blue by heavy recoil. Several products are available to tame recoil, and Lewis feels one of the best is the Cellini Stabilizer System, above.

## Adios Recoil

**By Don Lewis**

**Photos by Helen Lewis**

**B**ILL NICHOLS checked his watch and grimaced as he pulled his sleeve over his watch. "It's less than two hours to the end of doe season," he said, casting a seasoned eye at the dark clouds swirling overhead, "but we'll do what we can. I've shot deer on the last hour of the last day in several other seasons, and that's what we'll do this year, too."

Bill and I hashed over the day's events as he steered his 4-wheel-drive through the back country of McKean County. I suggested that he should have spent more time hunting than helping the rest of us get deer. By the time he got everyone else's deer back to camp and strung up, the final day was about over.

Ten minutes later we entered some big timber that Bill said was too wild for most hunters. We didn't go 200 yards before fresh tracks caught Bill's eye. He followed them for 50 yards before stopping.

### Full 15 Minutes

"They're headed for East Branch but they won't cross," he said as he poked his finger in a fresh hoof mark. "Give me a full 15 minutes to get into the hollow where the double pipeline crosses, and then push them through. Don't worry about getting lost; I'll find you."

"Or my remains," I said softly.

Bill hadn't gone 50 feet when five does came over the ridge. He swung and



**HANDGUN** enthusiasts can reduce recoil, too. The Cellini Stabilizer System can be installed on revolvers, left, and single shots, such as the Thompson Contender, above.

fired, and he added another “last day, last hour” deer to his long deer hunting career.

“You made a great 125-yard shot on a running deer,” I said in my best complimentary voice. When Bill didn’t say anything in return I glanced in his direction. He was gingerly rubbing his shoulder, which had been injured a year before.

“You’re not suggesting that Remington 8mm Magnum kicks?” I said with a surprised look on my face.

“No, it didn’t kick me; it just jarred me from head to toe. My toes are humming like a bunch of tuning forks. Man, who’d ever want to hunt deer with a shell that size?”

### My Request

To set things in order, Bill was using the 8mm Magnum at my request. I was in the process of running range and chronograph tests on the cartridge that Remington had just introduced. I had already shot a deer, so Bill volunteered to use the 8mm Magnum. His two favorite deer cartridges are the 257 Roberts and the Remington 7mm-08. Each is a long step from the massive 8mm Magnum.

Recoil is the Achilles’ heel for tens of thousands of hunters. In fact, no one enjoys being battered black and blue from the backward thrust of a rifle or shotgun. A dictionary definition of recoil states that it is the “act of recoiling.” Well, that doesn’t help matters, and it

also doesn’t throw much light on what recoil is. Hunters and shooters, however, know recoil as a painful backward thrust of a firearm when it is fired.

Recoil is associated with several factors: cartridge size, gun weight, and stock design. To add to the shooter’s woes is the inescapable fact that recoil not only pushes the rifle or shotgun hard into the shoulder, it also causes the barrel to whip up. Recoil occurs in line with the axis of the bore, and because the hands holding the firearm are below this force, the muzzle goes upward. I have fired many rifles in which muzzle whip was as annoying, if not more so, than the recoil.

Recoil is measured in foot pounds. There are charts and formulas for accurately determining the recoil energy a firearm produces with a given load combination. That’s all fine and dandy, but it’s of little help to the person who is recoil shy to start with. What the heck is the difference if the recoil is 14 or 19 foot pounds? If it is painful or a psychological deterrent, knowing the foot pounds of recoil is of little consequence. The shooter wants relief.

Relief from recoil normally comes from dropping down to a smaller car-





tridge or using a heavier than normal rifle. Today, with the emphasis on light-weight rifles and high velocity cartridges, recoil is something we all have to reckon with. It isn't a new kid on the block; hunters and competitive shooters have been waging a constant war against recoil and muzzle jump but, until recently, not much progress had been made.

Gun builders and gunsmiths have been tinkering with recoil devices for decades. After World War II, a Sha-Cul muzzle control tube was on the market for less than \$15, not including installation. It was supposed to reduce recoil, eliminate muzzle blast, and do away with muzzle jump. It carried some rather impressive claims concerning its recoil eliminating ability.

### Also Claimed

Not only did it reduce recoil substantially, but its maker also claimed that all rifles, except those using extremely light loads, would have approximately the same recoil. Along with that was the claim that it wiped out all the muzzle jump to the extent that the barrel "does not rise into the line of sight, therefore making it possible to keep the target or game in view for a second shot."

Muzzle blast also went out the door because the high frequency sound waves were eliminated. The advertising pointed out that the device was not a silencer; it merely removed the objectionable ear-ringing muzzle crack, which most shooters object to and which is a major cause of flinching.

About the same time, the Johnson Muzzle Brake was being touted as a wartime device used by European armies on everything from automatic rifles to anti-aircraft artillery. It was supposed to reduce recoil by 40 percent, and it sold for only \$6 plus \$3 for installation.

Did those recoil eliminators and muzzle stabilizers work? Apparently not or they probably would still be in use today. During the years I gunsmithed, I saw relatively few recoil eliminators. The Cutts Compensator was something of a combination choke and



recoil reducer. Its ventilated sleeve directed the hot gases up or down, and not out the sides. This diverted the blast away from other shooters. It's worth repeating that the Cutts Compensator was designed primarily for interchangeable choke tubes. The manufacturer did not claim it was solely for reducing recoil.

For more than ten years Mag-Na-Port International, Inc., has been cutting trapezoidal ports (shaped like a trapezoid—quadrilateral having only two sides parallel) into muzzles by an electric discharge machining process.

### Mag-Na-Port

According to literature from Mag-Na-Port, on handguns they cut two trapezoidal ports in the barrel approximately ¼ inch from the muzzle. Mag-Na-Porting a rifle consists of making two trapezoidal ports and two oval ports. Two are 180 degrees apart, on each side and approximately 1½ inches from the muzzle; the others are 45 degrees from each side of the top centerline of the barrel and located somewhat forward of those on the sides of the barrel.

The brochure went on to say that tests conducted by H. P. White Laboratory



**AS THE firing of this automatic firearm shows, the Cellini Stabilizer System keeps the barrel level, even during rapid firing. It reduces recoil by about 50 percent and has no significant effect on velocity.**

with a pair of M 3000 Mausers (one Mag-Na-Ported, the other untouched) chambered for the 7mm Remington Magnum showed the Mag-Na-Ported rifle generated 28 percent less free recoil than the untouched rifle. Also, velocity loss was just a fraction of one percent.

The small vents are hardly noticeable, and the rifle's balance is unchanged as only minute amounts of metal are removed. From all I have heard, Mag-Na-Porting is an efficient recoil reducer but, because I have never fired a Mag-Na-Ported firearm, I am passing on only what I have read and heard. I would be remiss if I failed to say that a few years ago Mag-Na-Port asked me to send several firearms to be Mag-Na-Ported, but I failed to take advantage of their generosity, so can't give a personal report.

### **Psychological Aspects**

In November of 1987 I was gathering material for a column about the psychological aspects of handling recoil. The column was not primarily on reducers or stabilizers. I sent a number of requests to various makers of recoil eliminating systems, requesting data and photos. I explained that I was not working on a product evaluation type column.

I received several answers, including a brochure and a letter from Vito Cellini of 3115 Old Ranch Road, San Antonio, Texas, asking me to send a magnum handgun or rifle to have the Cellini Sta-

bilizing System installed. I read the literature and packaged up the 700 BDL Remington 8mm Magnum that Bill Nichols had shot the doe with. But I'm slightly ahead of my story.

I had fired that 8mm Magnum about 120 times in range and velocity tests, and knew firsthand what Nichols was talking about. I believe this 8mm is comparable to the 338 Winchester any day of the week when it comes to ballistics and recoil. To reduce the recoil I had a hydraulic system installed in the stock. When the rifle is fired the recoil is dampened by a hydraulic cylinder in the buttstock. This system worked to a degree, but it did nothing for muzzle whip. I removed it when the hydraulic cylinder leaked.

To be honest, I was leery of all types of recoil reducers and muzzle whip eliminators, but that was until I fired the first ten shots from the 8mm Magnum equipped with the Cellini Stabilizing System. I found it hard to believe. Before the Cellini Stabilizer was installed, the 8mm Magnum not only had a severe backward push, but the muzzle could have won the Olympic high jump. That rifle became a pleasure to shoot. I placed it on a sandbag and fired it without holding down on the forearm. Recoil was far less than normal, and the rifle did not jump off the bag.

Next came a 44 Magnum handgun. Normally, a two-hand hold is needed to stabilize a 44 Mag, but now I can shoot the big magnum with one hand, and there is no significant flip upward.

To my surprise, Vito Cellini dropped by my place on his way to England. I fired a number of his handguns, including a 45-70 on a Thompson Center frame. Each handgun was fired with one hand.

Cellini showed me a copy of a letter from one of the branches of the military, in which very high praise was given to his stabilizing system. In fact, it said his was the "best yet tested."

While discussing muzzle jump I pointed out that all thin barrel rifles have more than a normal amount of recoil and the annoying tendency to whip.



To prove my point, I shot Helen's Model Seven Remington chambered for the 7mm-08. Cellini said his stabilizer could correct that problem and it has. The Model Seven now has very little recoil and no muzzle whip. Bill Nichols said it was the perfect cure for his sore shoulder. I believed him, too, because he kept right on shooting my shells.

### Equally Well

The Cellini Stabilizer System works equally well on all types of firearms. Competitive handgunners, riflemen and trapshooters will produce better scores when recoil is cut in half and the muzzle stays on target. The hunter will certainly do more practicing. Cellini claims there is very little felt recoil in cartridges up to and including the Remington 7mm Magnum.

The stabilizer is permanently screwed onto the muzzle. Apparently all centerfire rifle stabilizers are roughly 1 7/8 inches long and vary in diameters according to the sizes of the cartridges. The Stabilizer on the 8mm is 7/8 inch in diameter, and the 7mm-08's is 3/4 inch. From my point of view, the stabilizer does not destroy the esthetics of a rifle,

CONSERVE 89 marks the beginning of a new series of calendars by the Western Pennsylvania Conservancy. The artwork that graced their previous calendars has been replaced by outstanding color photographs. The day-to-day listings of places to go, things to do, and interesting facts about our natural world are still featured. Order from the Western Pennsylvania Conservancy, 316 Fourth Avenue, Pittsburgh, PA 15222. Price is \$6.36, delivered.

and it does not interfere with the sighting arrangement.

As I understand it, the Cellini Stabilizing System does away with the forward burst of hot flame and gases that, when striking the atmosphere, generate recoil and muzzle whip. Nighttime photos show no flame. Also, there is no loss of velocity. My average velocity figures on the 8mm, prior to the stabilizer being installed, were only 10 fps higher than with it on.

I think we can honestly say, "Adios recoil. You've had your day."

## GAMEcooking Tips

I suppose almost everyone thinks that their mother is the best cook ever. In my case, not only my mother was a great cook, but so was my grandmother. Here's one of our family favorites I hope you'll try.

### Grandma's Hasenpfeffer

- 1 rabbit, cleaned and cut into serving size pieces
- 2 cups water
- 2 cups white wine vinegar
- 1 onion, sliced
- 1 tablespoon peppercorns
- 1 teaspoon salt
- 2 or 3 whole cloves
- 2 bay leaves
- 4 tablespoons butter
- 1 cup sour cream

Place rabbit pieces into a bowl or bag and cover with the water, vinegar, onion, peppercorns, salt, cloves and bay leaves. Allow to marinate in the refrigerator 1 or 2 days. Heat butter in heavy skillet. Brown the rabbit on all sides. Add 1 cup marinade liquid. Simmer covered one half hour, or until meat is fork tender. Stir in sour cream and stir until heated through. Serve immediately. Serves 2.

—FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY

# *In the wind*

bob mitchell



For killing two black bears on the White River National Wildlife Refuge in Arkansas, the poacher not only was fined \$1000, lost his hunting privileges for three years and ordered to perform 400 hours of community service, he also was ordered to read a doctoral dissertation about black bears and then report back to the judge about what he had learned. The arrest resulted from tips provided by concerned citizens.

**The U.S. Navy plans to stop dumping plastic wastes at sea by 1992. Under current Navy procedures, according to the National Wildlife Federation, trash is currently held on board if the ship is within 25 miles of shore. If not, the trash is dumped overboard.**

Two of four wolves captured on Isle Royale were found to be carrying canine parvovirus (parvo) a deadly disease among dogs. The wolves were live-trapped a year ago, in an unfortunately precedent setting effort to discover why their population has dropped from around 50 to a dozen in the last several years. The island national refuge wolf population has been the focus of an ongoing predator-prey study that began in 1958, soon after wolves arrived there. The live-trapping marked the first human interference with the wolf-beaver-moose cycle. Or so researchers thought. It now appears that a trespasser (unquestionably somebody who should have known better) brought a dog along, and that the virus was left there in its feces.

Ten female brown bears were captured on Kodiak Island last summer and equipped with radio transmitters as part of a long-term study of the bears' reproductive biology. Funding for the study is from the Kodiak Brown Bear Research and Habitat Maintenance Trust, which was set up as a result of mitigation when a hydroelectric project resulted in the loss of brown bear habitat.

**As of last fall, 25.5 million acres had been enrolled in the Conservation Reserve Program. It's hoped that 45 million acres are enrolled by 1990. Of those acres already enrolled, 1.6 million have been planted with trees, and 16,000 have been enrolled as filter strips along 1300 miles of streams. It's estimated that soil erosion has been reduced by 530 million tons a year.**

Maine's first moose season in 55 years was held in 1980, when 700 permits were issued. None was held in 1981, but 1000 permits have been issued every year since. Annual hunter success rates over the seven seasons ranged from 74 to 91 percent, and hunters, on average, have reported passing up 1.4 moose for every one taken.

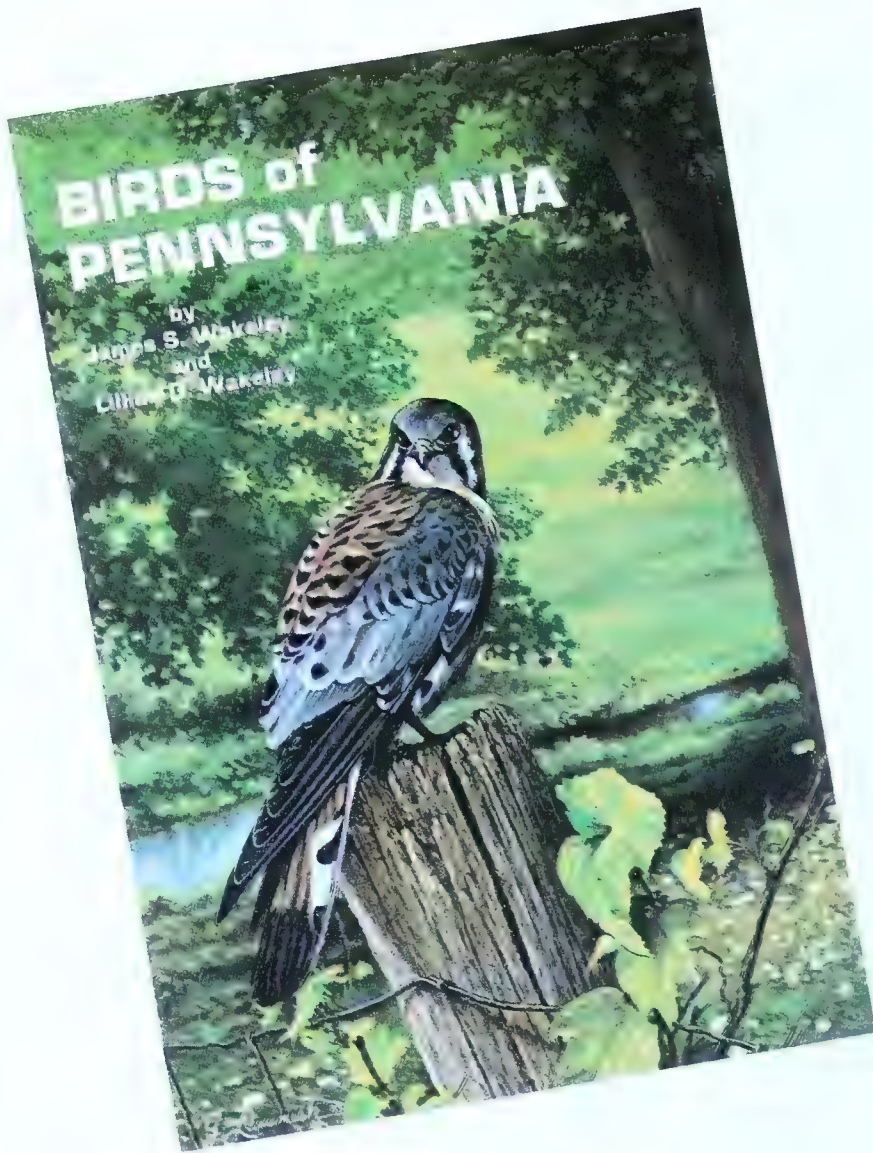
California bighorn sheep are being threatened by grazing policies on federal lands, claims the Sportsmen's Council of Central California. As reported by the Wildlife Management Institute, bighorns ranged throughout the Sierra Nevada Mountains in the state, until domestic sheep arrived and spread bacterial pneumonia. Only 330 bighorns remain. The California Department of Fish and Game tried to reestablish bighorns on national forests in 1980 and 1988, but in each attempt the transplanted herds perished because domestic sheep were allowed to graze nearby. Ranchers, it's reported, pay 31 cents per month for grazing privileges, a rate that doesn't come close to covering the government's grazing program.

Answers: 1) Northern Cardinal 2) Evening Grosbeak 3) White-Throated Sparrow 4) Tufted Titmouse 5) Blue Jay 6) Purple Finch 7) American Goldfinch. Bonus: Sunflower Seeds





*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in **GAME NEWS**. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover books costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797.



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Nicholas A. Rosato  
89



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**COVER PAINTING BY NICK ROSATO**  
(Cover Story on Page 19)

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## Readers Respond

**W**HAT'S A landowner to do about slob hunters? We raised that question last November, when we asked readers what a Farm-Game cooperator, who has most graciously left his property open to public hunting for the past 28 years, should do about a few individuals rudely taking advantage of his hospitality.

Racing him to his stands, posting within talking distance, and hunting within his cabin's Safety Zone, are just a few of the disrespectful actions that have frustrated the landowner and ruined his and his family's hunting opportunities.

We received a lot of replies, from landowners and sportsmen, residents and nonresidents, old hunters and young hunters, even a couple from some avid anti-hunters.

Many were amazed at the landowner's extreme patience and that "No Trespassing" signs hadn't already been erected. Several hunters emphasized that the landowner shouldn't feel the least bit sorry or guilty for posting his property, that he obviously had been most tolerant. A few writers even offered to post the property for him.

Others expressed their embarrassment and offered apologies on behalf of the vast majority of sportsmen. A lot of readers pointed out that with so much prime hunting territory being lost to development, that it's particularly disheartening to needlessly lose even more through the action of a few senseless individuals.

Quite a few nonresidents, including former residents, reminded us how fortunate we are to have so much land in Pennsylvania open to public hunting, and that those who take such access for granted and abuse the privileges are just extremely shortsighted.

Surprising, to me, anyway, was to find that the most common suggestion was to post the land not with "No Trespassing" signs, but with "Hunting by Permission Only" signs. One individual even sent a real nice sample.

Several landowners related similar experiences of disrespect, and described how the "permission only" approach allowed them to still welcome sportsmen on their property but eliminate the slob. More than one landowner said that after three or four years the problem individuals just stopped coming around.

We are, indeed, fortunate to have access to so much private land here. Through the agency's public access programs, nearly 30,000 landowners permit public hunting on 4.5 million acres. The Game Commission has taken the initiative in obtaining this access, but it's up to those who actually take advantage of the privilege to keep the land open.

As these many replies show, about all any landowner wants in return for granting access is to know who's on his property. Asking permission is something everybody should do before trespassing on private land. Furthermore, sportsmen shouldn't tolerate illegal and unethical behavior of others, especially when on private land. Don't place the burden of watching out for his property and interests entirely on the landowner. If you encounter somebody doing something illegal or disrespectful, let the person know what you think and then report him to the landowner. That way you won't be blamed for something somebody else did, and the landowner will in all likelihood appreciate your concern for his interests.

What this particular landowner decides to do is entirely up to him. He was sent all the replies we received, except for the one we were asked not to forward. But in the long run, it's the users of private land who will decide how much access sportsmen have in Pennsylvania, and it's up to each of us to do our part. —*Bob Mitchell*





RED FOX tracks were a common sight in the open fields. Now the deep crusted snow presented problems. He would be forced to chase prey during the daylight hours, and that would most often end in defeat.

## Wildlife's Winter Days

By Connie Mertz

**T**HE FOREST was silent except for a breeze that rattled the white oak leaves still clinging to a nearby tree. Afternoon shadows intertwined on the foot of crusted snow. I walked with difficulty through the peaceful, yet cruel, winter day.

It was a relief to get home and feel the warmth of the wood stove. Rubbing my reddened hands, I glanced out the window. Three pairs of bluebirds dotted the small red maple. They looked cold and uncomfortable. Just a few days earlier I had watched them enter the bluebird house. There was no rivalry; now their only concern was survival. As I continued to watch them, a sudden guilt swept over me. I had all the comforts of home on this sub-zero day, but while I basked in the warmth of the woodstove, they were forced to endure the cold pene-

trating winds. These delicate little songbirds and the numerous other wildlife species had no choice. They either survived nature's cruelest test or they didn't.

### Hours of Enjoyment

My thoughts drifted to the white-tailed deer. We always were thrilled to see them on the farm. They had brought us many hours of enjoyment throughout the year. Would the pines provide enough protection through the winter months? Was there food enough to sustain them until the snow melted?

Red fox tracks were a common sight in the open fields. Now the deep, crusted snow presented problems. The red fox would have trouble digging through the blanket of white. He would be forced to chase prey during the day-

time hours, and that would most often end in defeat. Yes, he would have a difficult time at best.

Then there was my favorite little animal, the cottontail rabbit. Often, I had found their furry nests near the yard, and had watched them scamper about through the hayfield. There was certainly an abundance of these little creatures. Was Mother Nature allowing this surplus, knowing that a harsh winter lay ahead?



Wintering birds made their presence known in the woods adjacent to our country home. There were bluejays, cardinals, white-breasted nuthatches, chickadees, and downy woodpeckers. Were there enough wild seeds and hibernating insects to sustain them until the snow disappeared?

Strange, how I had never really thought of wildlife's winter days before. From my vantage point, I scanned over several acres of fencerows, fields, and forest. In the field bordering our lawn were goldenrods and wild carrots.

Standing erect, just their tops barely surfaced above the snow. This area proved to be a haven, especially for chickadees. A few rows of field corn were left standing and unhusked to provide food for any wild animal that discovered it was there. Deer tracks were common, and squirrels often feasted on the tasty ears. A small patch of jack pines stood below. Their green branches harbored many wintering birds.

A neglected hayfield adjacent to the pine bank was a miniature forest in the process of natural succession. Dogwoods and sumacs dominated the area, supplying food for many birds. The ground cover plants made ideal habitat for white-footed mice and other rodents, which, in turn, made the area a favorite hunting ground for the red and gray foxes.

**WINTERING BIRDS** made their presence known in the woods adjacent to our country home. There were bluejays, cardinals, white-breasted nuthatches, chickadees and downy woodpeckers.

I could even see the treetops from the fencerow. Here, the red-tailed hawk often perched, scanning the young forest for an easy meal. This fencerow and others on the farm were gold mines. Not only was there an abundance of food, but also shelter. Several woodchuck holes were now being used not only by the hibernating woodchucks, but the abandoned tunnels were also ideal for skunks, rabbits and opossums.

To the west of the backyard was a forested area. It was in this environment that my family spent many fall afternoons cutting and splitting firewood. Our brush piles were no doubt being utilized by a variety of animals. The decayed trees, some infested with carpenter ants, supplied a good source of food for the pileated and downy woodpeckers. Tree cavities would give temporary homes to the owls, squirrels and raccoons.



MY THOUGHTS drifted to the white-tailed deer. Would the pines provide enough protection through the winter months? Was there food enough to sustain them until the snow melted?

My tinge of guilt subsided as I reflected on wildlife and the natural foods available to them. I was glad for the corn stalks and the small patch of buckwheat left unharvested. I was glad for the unsightly brush piles that dotted the woods. I was glad for the pines we had planted a few years ago. I was really grateful for the bluebird houses that had been built by willing hands.

I was aware that not every wild animal would survive through this long cold winter. That was all within nature's delicate balance, but I felt satisfied that in our own small way, we had helped to make their winter days a little easier.

Come spring, there will still be bluebirds singing, and the doves will nest in the pines. Fawns will be seen in a grassy field. The grouse will drum, and rabbits



will visit the garden. The snow will melt, and once again the farm will be alive with the sights and sounds of wildlife.

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# Compromising With Time

By George L. Harting

THE ANCIENT sage affirmed life expectancy is three-score years and ten. At a time, midway between the Holy Night and the New Year, I arrived; my birthday celebration demanded 70 candles. Whatever additional time remains is borrowed.

Much today, however, continues as it always has: Old trails and familiar coverts are revisited during night visions; the crow of a pheasant cock remains a resounding challenge; odors of dew on standing corn and the bouquet of wild grapes retain their attraction; a fleeing deer still elevates the proverbial blood pressure; the tangy fall aroma of dogwood or curing tobacco stimulates fond memories of the family farm; cold fall mornings highlight the pungency of skunk in the air; and every autumn a sprig from a tangled orange-red bitter-sweet vine finds a place over the wall-hung antlers in my den. The draw of nature remains constant and strong.

Nor has time dulled the senses: The eye continues to quickly pick up the crosshairs, and reflexes find the proper lead to make the scattergun effective. As a result, some satisfying harvests were accomplished last year. Every fall since 1945 has found me stalking corn strip edges in pursuit of mourning doves. It was during the recent season, however, that five doubles were registered from these challenging targets. Later, the crosshairs and the carbine were accurately directed to a vital spot; the prime yearling buck, while in full flight, met his demise instantly and humanely. It was performance superior to any experienced while taking 28 previous white-tails.

A typical hunter's boast, may be a reader's retort. Hardly. Rather, this review is a grateful evaluation by a vet-

eran. As an obliging audience is seldom available for the successful sportsman, some applauded self-appraisals are a marksman's right.

Why, then, compromise with time if marksmanship remains at par performance and if the lure of the outdoors has not been satiated? An answer may be found in the ancient observation: "man is fearfully and wonderfully made." His biological systems are many, yet unless all function responsibly, the rewards from the chase experience diminishing returns.

## Pace Setters

Some among us are born to be pace setters; every race must be won, every assignment fulfilled, every weight lifted, all bag limits filled. Intensive living is the heartbeat and it's a lifestyle that's devastating. In the 30s, Model T Fords were started in cold weather by elevating a rear wheel. But why waste time with a jack? At age 14 I backed up behind the wheel and lifted the rear of the touring car while Dad pushed a support under the axle. Such intensive and proud behavior, I've learned, takes its toll.

An old knee injury has hastened joint degeneration, and the thigh is experiencing progressive atrophication. The disc cushioning the lower vertebra ballooned and orthopedic surgery was prescribed; metatarsals have fallen, so the cobbler improvised corrective footwear. But there is more: Circulation has diminished. As a result, every hill becomes higher each year. Frigid weather brutalizes the extremities, and dragging home the big game harvest has become a Herculean chore.

The decay of time creeps upon us unawares. The Susquehanna River



AND EVERY autumn a sprig from a tangled orange-red bittersweet vine finds a place over the wall-hung antlers in my den. The draw of nature remains constant and strong.

I could have registered a Pennsylvania “grand slam.” In addition, 16 species of waterfowl have been taken during the Atlantic Flyway migrations. The lady in my house, whose kitchen philosophy is “Game’s My Meat,” expects my harvest and looks upon it as a staple. Our Thanksgiving emotions about game in the freezer duplicate those engendered by the canned fruits and vegetables filling our shelves.

But physicians advise us to slacken the pace a bit as we age. Few of us, unfortunately, heed the caution. When senior citizenship becomes a reality, however, there is no alternative; the fact of our mortality becomes inescapable. How, then, after 55 years of intensive involvement can one compromise with time while avoiding capitulation? Some suggestions follow:

### Opt For Selective Terrain

Whitehead Camp is built on a creek bed flat in Cameron County, typical whitetail country situated in Pennsylvania’s Endless Mountains. I was an invited guest for the first week of the antlered deer season. I arrived at camp Saturday night, and upon awakening next morning, I developed a decided “bottom of the barrel” feeling. There is no “down” in the environs of Whitehead Country—it’s all “up!”

During Sunday morning orientation, I spotted a tall pine standing as a sentinel on the ridge of the “Little Bummer.” I elected to take a stand on a ledge by the conifer for the opener. After an hour of climbing, I knew the ridge was well named. Fortunately, I harvested a buck during the first 15 minutes of the new season. Bringing the animal down, however, became an acrobatic chore. As gravity hurtled the carcass down the sheer cliff, my primary effort was to control its slide. After such early season success, my work was clear cut—group

sneakboat was guided past my stationary duck blind: the operator shouted “How ya doin’ Pop?” It was devastating when finally I realized he was speaking to me. I knew such a thing would happen, just not so soon.

Here’s the rub. I engaged in field sports with the same intensity I undertook other activities. A quote from a letter addressed to me in 1941 offers a clue: “Your gun is on the rack, cleaned and repaired. According to the weeds and seeds, etc. in the mechanism of your shotgun, I conclude that you are not a path hunter; you really go right in. I believe you hunt in the rain occasionally, as there was evidence of rust internally . . .” My personal footnote sealed the transaction: “With this letter my scrap book begins. May this note be a hint to the eight happy years of past hunting: I anticipate it will continue!”

Pressing the pursuit of game at so intense a pace has yielded some impressive lifetime harvests. Every legal upland game species in my state has been harvested, save the black bear. Had I mastered more efficient marksmanship,



hunting dictated I would drive deer for the rest of the week. As a driver, one is forced to run sheer side-hills in arcs. A sapling is grasped for support as elevation is lost, and a heave sends the participant into yet another upward swirl. Personal involvement in that type of intensive hunting today, however, is confined to scrapbook reference.

Contrary to the observation of the gun dealer referred to earlier, I am now a "path hunter." My involvement no longer includes beating the woods or fighting the brush. Fortunately, pursuing game at such a restrained pace doesn't imply an empty game pouch. Even a black bear—estimated to be 400 pounds—walked by the A-frame just ten minutes after the closing hour of the season's first day. Furthermore, 22 deer—antlered and antlerless—were taken this season within a two-mile radius in the flat farming country nearby. The real chore for the veteran is to develop the mental adaptability for a revised pace. A first compromise is to opt for hunting selective terrain.

### Welcome A Helping Hand

"You really don't need anyone to help bring in your deer," said the lady operator of the camp where I spent 45 seasons. During those years I brought 23 whitetails to the lodge and shared in similar work for successful partners. Today, the reservoir of such energy is running dry. A helping hand or the services of the camp tractor for retrieving deer is most welcome.

A sheer cliff rises just across from the meadow brook. Beyond the incline lies a series of farm woodlots that furnish excellent squirrel hunting. Climbing the cliff is the major chore for the day, for beyond lies some terrain perfectly designed for the bushytail enthusiast. On this occasion I invited the local farmer to share the hunt. At age 30 and conditioned by farm chores, he mastered the ridge as with a single leap; I struggled, pushing my hand on a degenerative knee to lend climbing power. The grade was slowly ascended. Noting the struggle, my young guest retraced



his steps, stretched out a hand toward mine and with the strength of a Percheron, pulled me to the wooded summit.

My initial reaction was embarrassment. For years I had skillfully mastered that terrain and lent a hand to others. It was I who was now on the receiving end, and the emotion created by this reversal was quite new to me. It has been rightfully observed that one cannot tolerate seeing all of himself on a single exposure. Time, however, is an enabler toward welcoming the outstretched hand of help. Fortunately, others among us will benefit by offering a lift, just as we once profited by giving it.

### Lay Memory To Memory

The outdoorsman who visits the stream he fished in his youth is likely to do more thinking than fishing. Such was the case when I visited the Cocalico last summer. The camera was more involved than my landing net. I marked again the eddy where I caught my first legal bronzeback, the same place I saw my first pair of woodies, at the time when they were nearly extinct. They rose from the willow-shaded Wabash pool. I recalled the abundant hellgrammites I gathered from the stone-studded riffles so prevalent along the stream. They contributed to successful fishing. Fortunately, indeed, is the mature participant who can glean such gems from memory's treasure chest.

My senior partner for outdoor adventure affirmed, "When I am old and have chin whiskers, I'll hunt and fish with my scrap book." His intent was much more

than an idle thought; he kept a comprehensive log of his outdoor adventures. As his physical energy dissipated he found enjoyable pastime paging through his notations and reliving the experiences he had as a loner and as a partner among friends.

Today, unfortunately, the scrapbook is of little use to him. He has been designated legally blind; his home is a nursing center where space is at a premium, and scrapbooks one no longer sees are useless excesses. For him, however, there are other ways to lay one memory beside another; he has a host of friends and I was among them as an understudy. I paid him a visit last spring and, upon arrival, was promptly reprimanded. "You ought to be trout fishing!" he quipped. In similar style, my winter visit began with the hungry declaration, "I've been praying you'd come to tell me about your hunting season."

Immature deer hunters who, for some reason, don't quite make it in the woods, compensate for their failure about the camp stove. They demonstrate a sense of belonging by showing off, each year, a new deer rifle. The veteran, on the otherhand, who for physical reasons can't quite make it as once he did can say, "Thanks for the memories!"

### **Patronize The Body Shop**

Promising reports were posted about the turkey population in Area 5. It was, therefore, with considerable optimism that we traveled to Camp Lehigh for the final two days of the fall season. Reports of feeding flocks circulated, and one, allegedly, frequented the half-way mark on the west side of Jack's Mountain. Being a guest, I regarded it as a part of discretion to leave the hot spot for the regulars.

Upon my return for lunch I found a mature 12-pound hen tied to the foot railing of my bunk. The fact that a fine trophy was harvested was not the item of surprise; to learn, however, that Burky was the successful one made my day.

On a visit to his home several years

earlier, I found him sprawled on the floor, suffering agonizing pain. An arthritic hip joint made daily toil a trevail for him, and at night neither sitting nor lying brought relief. He made a decision: a date was set and a hip replacement was scheduled. A year passed and the suffering experienced earlier was duplicated as a second joint cried out for attention. Savoring the success of his first exposure, he grasped at the chance for a repeat performance. With two hip replacements behind him, Burky enthusiastically endorses the benefits of "The Body Shop!"

A third blow was sustained by my pal—a man whose reputation as a gentleman makes him the Salt of the Earth. Triple by-pass surgery with unbelievable complicating infections were his lot. Notwithstanding, this is the hunter I saw, with staff in hand for support, enter the trail leading to the summit of Jack's mountain. His objective was to intercept the magnificent game birds that were reportedly feeding there. He is the same Burky who, having benefitted by modern surgery, extended his hunting days and, to celebrate, hung a trophy on my bed rail.

### **Don An Electronic "Security Package"**

That heading above is an idea, the time for which has not yet come. We seniors dream of it, however, in our night visions.

A recent Mark Trail cartoon hints the concept may have practical applications for the outdoorsman. Trail was portrayed as having apprehended several drug smugglers whose loot had been dropped in a remote area from a plane. The culprits easily located the air-drop by using the same type of telemetry equipment used for tracking wild animals.

Some of us believe such electronic devices would be adaptable for those who take to the out-of-doors; the system would be especially assuring for senior hunters.

There is no need to enumerate the many potential pitfalls that may strike



mature people who take to the deer trails. When debilitating experiences occur, an electronic tracking system would be a comforting security package. If a gobbler can be followed from one mountain to the next, if a sow bear can be traced to the den where her cubs are born, and if the welfare of fox squirrels introduced to new areas can be monitored, why would this same technology not be applicable for the outdoorsman who may have met with misfortune?

It is the part of wisdom for the hunter to identify the side of the ridge he is working. Then, if he does not appear at camp as planned, a tracking device could lead to his rescue before shock, hypothermia or a heart attack, for example, takes its toll.

What a profitable challenge adapting such a device for outdoorsmen extends to the commercial world of electronics.

The accent for the youthful nimrod is acquisition: a first scattergun, an improved caliber for hunting deer or membership in Dad's hunting club. The desire to acquire the latest gear is paired with the urge for success. Weight in the game pouch and a trophy from the ridge pole — these are the essence. Such motivation moves from a lull to a crescendo until maturity. At that point, however, interests shift. There is little desire to replace the old double. The old carbine featuring a modest caliber, but one that has been efficient, gains the status of an heirloom. Being at one's stand an hour before shooting time is not really that important. Other motivations surface. Most of them are not satiated by bending a bank roll; they are fulfilled by maturity, experience and dedication.

The octogenarian who spent a lifetime enjoying the outdoors demonstrates perfectly the shifting interests that come with maturity. Major surgery and years have not halted those hunting and fishing excursions he enjoys; he has,

however sublimated them. Through the efforts of this mature sportsman, several thousand acres of prime forest land has been added to our State Game Lands. Today he is spending less time in his favorite duck blind to promote, instead, the program of Ducks Unlimited. He is a staunch supporter of local sportsmen's clubs, and in that relationship has spent many hours with youngsters who are involved with the hunter-trapper education course. You see, our veteran experiences return in knowing the youth of today and tomorrow will be able and qualified to enjoy, as we have, the returns from our outdoor adventures.

The aged surgeon acknowledged he occasionally plys his art "to keep his hands in it." So too, as the years roll by, mature sportsmen continue to commune with field and forest until, as Robert Louis Stevenson put it, "The hunter (is) home from the hill."



**YOU SEE, our veteran experiences return in knowing the youth of today and tomorrow will be able and qualified to enjoy, as we have, the returns from our outdoor adventures.**



**MY FIRST** few seasons with the muzzleloader had been excellent. Two years in a row, a buck had fallen from the browned octagonal barrel. But then my jinx set in, and it clung firm for ten seasons. Things always seemed to go wrong.

# The Allegheny Jinx

By Mark Cerulli

**W**ITH THE BRASS buttplate on the ground between my feet and the barrel braced with my knees, the rifle's muzzle reached to a convenient height, inclined safely away from my body. The stubby, hollowed-out section of deer antler would hold 100 grains of blackpowder, and I held the measure in my left hand and poured a thin stream of powder from the old powderhorn in my right, until the antler was full. I tilted the measure into the muzzle and tapped lightly to make sure no powder remained to throw off my charge.

After thumping the breech with my hand to settle the powder, I placed a greased patch across the muzzle, and a 53-caliber round ball on the patch. A sharp slap on the starter drove the ball into the bore, then, using the leg of the starter, I pushed the 220-grain slug a few inches farther toward the breech. The ramrod, held firmly with both hands, sent the ball the rest of the way down the 32-inch, 54-caliber barrel

until a mark on the rod and firm resistance told me the ball was properly seated. Though loading the muzzleloader might have seemed an impossibly long, involved process to some, I had performed the operation so many times that I found a certain rhythm to the steps, as if absorbed in a simple, primitive dance. I enjoyed the ritual.

But even while loading I felt a nagging doubt as to my choice of arms. My luck in the past ten years of hunting these Allegheny ridges had not been good while toting my Green River Lemman Trade Rifle. My first few seasons with the gun had been excellent. Two years in a row, a buck had fallen to a round ball from the browned octagonal barrel. The largest, a 9-pointer, was one of the largest bucks taken by our group from our Centre County hunting area in over 30 years of hunting.

Hunts in the seasons following my back-to-back success had yielded memories but no bucks, as if I'd somehow



acquired a jinx with the rifle in these mountains. I've never been one to measure the success of a hunt merely in game on the meat pole—if I had I wouldn't have spent so many years with a muzzleloader—but I also thought of my little Model 94 32 Special, topped with a 2x scope. The carbine was a handy, accurate rig, ideal for the Pennsylvania hardwoods we hunt. The Winchester carbine was also at home, left behind after I chose to lug the 9-pound muzzleloader again this year. Maybe I should have switched guns to swing the odds in my favor.

My jinx was surely bad luck . . . still, whatever it was, it had clung firm for ten seasons. Things always seemed to go wrong somewhere between seeing the buck and dressing the critter out. A replay of previous hunts started ticking away as I readied my gear on opening day of last season.

There was the buck with a clearly visible rack that escorted at least a dozen does across the flat below my stand. He remained in just enough cover to prevent a shot, and tantalized me as the group's route paralleled the ridge I was on. Crabwalking backwards out of sight, I sneaked along the rear slope of the ridge in the direction taken by the deer. When I guessed I was even with their progress, I eased over the top, rifle poised. Cupped ears and wide eyes were riveted on me from everywhere below. The buck "absorbed himself" into the herd, and the whole bunch drifted out of sight in the trees.

The following season I'd installed a tang peepsight on the smokepole in place of the crude v-notch rear sight. Visions of buffalo hunters with similar sights mounted on their long range, large caliber rifles suggested tack-driving accuracy—just the thing for tagging a buck from my ridgetop stand, I decided.

The deer were there suddenly, two does and a chunky spike that hugged the base of the ridge I was on, then trotted directly uphill toward me. They were only scant yards away. I swung on the buck, but couldn't line up that tiny



#### Question

It is lawful to carry a loaded firearm on an ATV or snowmobile?

#### Answer

It is unlawful to operate or ride in any snowmobile or ATV with any loaded firearm in possession.

aperture with the front sight while trying to get on the bounding rascal. The group disappeared with no shot fired.

Now change the scene to another season in the same area, this time with that silly peepsight replaced with a square-notch rear sight. An hour into opening day, a racked buck and a doe approached my stand. I was ready, and when they both paused, my rifle's smokescreen blotted out the buck. The deer were suddenly gone, leaving abrupt gouges in the snow. Blood accompanied the buck's trail, and I prayed for a quick kill as I nervously followed . . . and followed . . . and followed. The hit was obviously a poor one, and after three hours, my hope of claiming the buck changed to a fervent wish that someone, anyone, would shoot "my" deer and end this ordeal.

The rifle's blast ahead startled me, then there was another, and the deer was down. The hunter saw me approaching on the trail, and I think he was a bit surprised when I expressed relief that he had killed my buck. The rack was a small six.

There's more. During another deer season, on the second day, a lone deer

suddenly appeared on the flat in front of me, appearing jack-in-the-box fashion from the steep ravine I overlooked. A doe, I surmised, but then the deer turned its head and revealed two spikes. I eased the heavy rifle into position as I snicked the hammer back, and leaned solidly against the tree I was seated under. The buck was broadside and motionless at about 40 yards, with a wrist-thick branch crossing that vital chest area. Confident I could sneak a slug below the limb, I held a tad low and squeezed off the shot.

With the rifle's blast the buck bolted away, tail down-indicative of a fatal shot, I was sure. After reloading as calmly as possible (not very), I inspected the buck's prints in the snow where he had stood when I fired. No blood. I couldn't believe my eyes, and slowly followed the trail, expecting to find blood at any time. Nothing.

I returned to the deer's original location and inspected things more carefully. There, between the interfering limb and the buck's tracks, was a handful of fine splinters. My careful shot had

blasted the branch dead center, and the shattered exit hole indicated the ball had deflected upward. Looking in the direction of the shot, I saw the mangled slug imbedded full depth in a tree trunk a foot above where the buck's chest had been.

Not to be denied a trophy, I whittled the ball out with my knife and took a close-up picture of the limb with my camera. If I'd had a saw, I'd have been tempted to retrieve the splintered section of oak and mount it on a plaque. After all, at the rate I was going, anything remotely associated with a buck could be considered a trophy.

Trying to put thoughts of past bad luck out of my mind, I finished checking the rest of my gear as I stashed the supplies in my daypack. Lunch, thermos, and possibles bag were all set; then, almost as an afterthought, I tucked my little 35mm camera in, too. My luck had to change sometime. But judging by the weather, today was not to be the day.

Rain had drummed off the roof of the cabin all night, and the temperature rose steadily into the 40s. The woodstove that had heated the cabin to a cozy level gradually grew to a fire-breathing dragon as the outside temperature climbed. Blankets were pushed aside as the three of us tossed and turned, sleeping fitfully. I finally staggered to the door and swung it open to cool things down. Perhaps prompted by the memory of the huge bear tracks we'd seen in the snow near the cabin a few years earlier, I reluctantly latched the door before groping my way back to my bunk.

The next morning Bob Buck and Jay Mason and I shared a bleary-eyed breakfast before heading for our stands. Though exhausted, I chuckled as we gathered up our gear. An observer might have thought he was in a time machine as each of us passed through



**I HAD** seen plenty of rubs and scrapes in the area. Some of the rubs were on saplings as thick as my wrist, indicating the area had been frequented by at least one hefty buck.



the door. Bob, with his scoped 30-06, was from the present, while Jay was stepping out of the Old West with his hogleg, a Ruger 44 Magnum revolver (though the 2x scope wasn't quite correct, historically). My muzzleloader dated me from frontier days.

We separated and made our way to the stands we'd selected while scouting the day before. The laurel was dripping from the night's downpour, so I slipped on rain paints before starting my hike to where the mountain dropped off steeply. Though I might have been over-cautious, I wrapped a plastic bag around the breech of my uncapped percussion rifle, guarding the powder charge from the slap of wet foliage. Wet powder was one alibi I had no intention of using.

I crossed the laurel-covered area and dropped down to the shelf I hoped a buck would cross while climbing from the farmlands below to the security of the mountaintop. I had seen plenty of rubs and scrapes in the area. Some of the rubs were on saplings as thick as my wrist, indicating the area had been frequented by at least one hefty buck.

The wrench in the works was the wind. As I settled down against my favorite tree, powerful gusts roared through the treetops, dropping dead limbs. The jinx was alive and well, I thought, and jumped as another branch crashed down nearby. Deer hunting is a waste of time in the wind, I could remember experts saying. I fought against my pessimism and concentrated on seeing any deer before they saw me. With all the racket of the wind, I knew I'd never hear anything before it tripped over me. A large rock placed against an oak served as a seat, and with a piece of foam pad on top, wasn't uncomfortable. The big 54 lay across my lap, capped and ready. I was all set.

Legal shooting time was announced by a smattering of shots from the surrounding ridges and valleys. Someone was seeing a few deer in spite of the wind, and my flagging hopes were boosted.

Less than two hours had passed when

the white linings of the deer's ears caught my eye as a whitetail approached through a stand of saplings. Then another gray form bobbed along behind the first. My grip slid to the sturdy wrist of my trade rifle, my thumb resting on the hammer, while I flattened against the tree. My pulse increased until I could hear the thud-thud-thud in my ears.

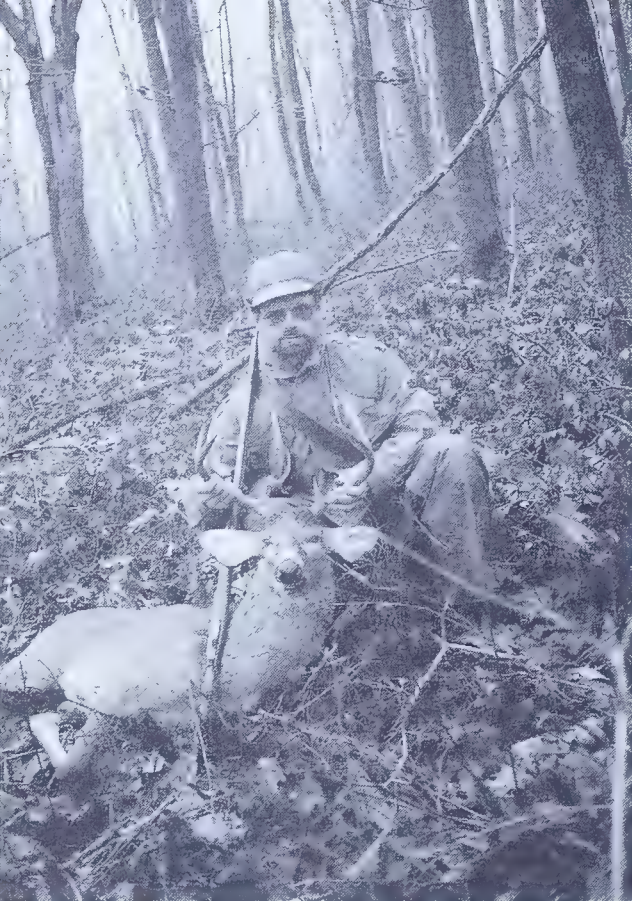
The first of the two deer looked hefty enough to be, and I expected to see antlers when it stopped and stared nervously, only 30 yards away. The big deer was smooth-headed, though, and I turned my attention to where my rifle was already directed toward the second whitetail. The antler beam was yellowish in the drab brush as the buck stopped, suspicious at the doe's behavior.

### Tightly Framed

The shot would be about 50 yards. From a rest, my buffalo gun would throw slugs in a fifty cent piece at that distance, but the buck was tightly framed by tree trunks. Only a small opening on the chest, about six inches, was clear, and I considered waiting for the deer to move to a better position. Then the doe, still studying me, stamped nervously, and I knew she was on her way and the buck would follow.

The orange-bladed front sight was steady on the deer, then everything seemed to ease into slow motion. The blast of the shot jolted me, and I sensed orange sparks superimposed on the cloud of white smoke. I was vaguely aware of the doe bounding downhill, but the buck was blotted from sight by the smoke. I rose to my feet and reached for my possibles bag to start reloading. I saw the antlers rise, then fall, from the knee-high brush. I had a hit, but how good?

My hands were shaking as I fumbled with powderhorn and measure. It seemed forever before the ramrod finally snugged the ball against the powder. Even with the wind, I thought I could hear brush breaking where I'd last seen the deer. Walking as quietly as



possible, I approached. The buck was down, but not dead, and another shot quieted him. For what seemed the first time in ages, I breathed deeply, then bent to examine the beautiful 8-point rack. The antlers, I found later, spread to a respectable 17 inches, the tips curving and proud. A very handsome buck for this mountain country.

Kneeling next to the buck, I touched the warm flank, saw the steam rising from the deer, and smelled the sweetish, musky odor of the animal's damp body. I'm not a conventionally religious person, but I paused and gave a sincere, impromptu message of thanks to the Great Provider for the privilege of harvesting the buck, then spent a few silent moments in respect to the buck's spirit.

Jubilation took over then, and anyone observing would have seen a hunter

**FOR WHAT** seemed the first time in ages, I breathed deeply, then bent to examine the beautiful 8-point rack. The antlers, I found later, spread to a respectable 17 inches, the tips curving and proud.

babbling to himself about his good luck as he tried mightily to remember which end of the knife to hold.

Before actually dressing the buck, I unlimbered my camera and proceeded to fire away at a rate to bring tears of joy to the eyes of film developers. For a shot of myself with the buck, I snugged the camera to a sapling with a tiny clampod, released the self-timer, then scrambled next to the deer before the shutter tripped.

My attempt to drag the dressed, 140-pound buck uphill toward the car was soon abandoned, and I found Jay's stand and shared my good news with him. After congratulations, he agreed to keep an eye on my deer while I drove to a road in the valley below, which would let me enlist the help of gravity with the drag. I declined Jay's offer for help in getting the buck out of the woods. I had the rest of the week, I figured, to retrieve my prize, while his buck was still frisking about the countryside. Four hours after shooting the buck, he was hanging back at the cabin. I was exhausted but happy.

The rest of the week was anticlimactic. I hunted with a stockmounted camera and 300mm telephoto lens, and managed to bag a half dozen does, but no really outstanding prints. Poking around the ridges and attempting to move deer past my companions made for a very pleasant experience. Unfortunately, neither Bob nor Jay got a shot at a buck, though Jay did see antlers just out of range of his Redhawk. We concluded that my good luck was not contagious and, we hoped, neither was the jinx that had abandoned me!





THE ROCKETS shot out in an explosion of snow and leaves. The net trailed along to ensnare the valued quarry. But it was Friday the 13th. Turkeys scattered in every direction.

## ***Hard Luck Day***

**By Daniel Jenkins**

**WCO, Somerset County**

**I**T WAS a year ago this month, on a Friday the 13th, and I was getting ready to trap some turkeys. At 6:15 I was waiting for my helpers to arrive when I received a phone call from neighboring officer Clifford Guindon. His alarm hadn't gone off so he was running late. I assured him we would wait. He arrived at 6:30 and then we were on our way.

We made it about a half mile from my house when a horrible noise started coming from the front bearing area of my vehicle. I had had the bearing checked just the day before and was assured everything was okay. Well, we stopped on a level spot, examined the wheel and decided we'd keep going; we really needed the turkeys.

After going about a mile we found one of our helpers stuck in a snow bank. He said that when he didn't see us following him, he decided to turn around and

come looking for us. In trying to stop, however, he slid into a ditch. Only after we arrived did he discover he had wrinkled his front fender. "Push me out and we'll get going," he said. Well, we pushed but didn't get going. We did manage to push out his grill, however, which fell to the ground and broke. We then got a chain and dragged him out.

Already running late, we arrived at the trap site and set up quickly. I hadn't checked the net in advance because I always thoroughly clean and carefully pack it at the end of each trapping season. But when I noticed a rope coming out of the top of the box, not the bottom where it was supposed to be, I remembered I had loaned the net to somebody earlier in the season. I spent several minutes working the rope around the net and out the bottom before being satisfied it would work. In retrospect, I





**AN HOUR and a half later the birds appeared. It was the bearded hen trailed by 12 hungry followers. Our nemesis number was again before us, and we had already had one disappointment for the day.**

wish at that point I had remembered it was Friday the 13th.

We got inside the building and I started to set a VCR camera up on a tripod, both of which I had borrowed from Deputy Ira Harding. He had given me such good instructions I knew I'd have no problems operating his equipment. Just as I was making the final adjustments I asked somebody to hand me the recording tape laying on a nearby chair.

"No tape here," he said.

"Then it's in my bag," I replied.

"Nope, not there either."

"Oh, I'll get it," I said, feeling somewhat agitated. "It has to be in my coat pocket." It wasn't. I then made the announcement that although capturing turkeys was our primary objective, the video taping was also important and that I was going to sneak back to the car—about 200 yards away—even at the risk of scaring birds away.

As I eased out the door I overheard some grumbling about the whole day being ruined. I was grumbling, too, about how somebody could have left the tape in my vehicle while I was setting the trap. After a thorough search of the vehicle, however, there was still no tape. Impossible, I thought.

Back in the cabin, Tom Baldrige, Vice President of the state Wild Turkey Federation chapter, said he had last seen the tape on the couch in my office. Now I was really depressed. I was certain that's where the tape remained. I resigned myself to making no videos that day, but I was still optimistic about catching some birds. It was an ideal day for trapping, and the birds had been coming to the site on a regular basis.

Three hours later they arrived, a beautiful flock of 17 hens, led by a very watchful and confident bearded hen. The novelty of the bearded hen made up for our bad start, I thought, and we were all anxious to get a close look at her. The birds behaved perfectly; they were tightly grouped around the bait and each had its head down. The trap was ready. Boom!

The rockets shot out in an explosion of snow and leaves, and the net trailed along to ensnare the valued quarry. But it was Friday the 13th. Turkeys scattered in every direction. Four hapless young hens did manage to get caught by the misguided net. They lay pinned to the ground under a tangled mess that should have been a neat laid capture net. We removed and crated the birds and then examined the net. Two of the rockets had crossed in mid-flight, causing the net to spin like a tornado, which just happened to land on the four birds. At least the day wouldn't be a total disaster, I thought.

But the day wasn't over. With the four birds crated and loaded in my vehicle, I limped back towards the garage. I hadn't gone very far at all when I heard a new noise and then a screeching sound. When I hit the brake pedal the car suddenly pulled to one side and then took forever to come to a stop. Everything looked okay, though, so I proceeded slowly to the garage. As I drove it felt like the car wanted to go everywhere but the way I wanted. To make a long story short, we arrived at the garage and had the bearings checked again, along with everything else in the front end.

Cliff and I then put the turkeys on a trailer and headed for the Pittsburgh



airport. We arrived only to learn that the flight we were supposed to ship the birds on had already departed and that the next flight would be too late to reach the destination the same day. That meant I had to call the region office for approval to try another airlines. They said they would call Michigan. The call came back, don't change airlines. We were directed to ship to a different airport where Michigan officers would pick up the turkeys.

The trip home was a quiet one. I spent the time thinking of all the things that had gone wrong this day.

Thirteen days later conditions were again right for turkey trapping, and this time things went as they were supposed to. Everybody arrived on time, vehicles were working (I had had the bearings replaced) and we arrived at the site with everything, including the VCR equipment, in good order.

Around 11 o'clock the first birds were spotted. As they came closer our pulses quickened. There were 11 birds, all gobblers. Several were nice, and gobblers were just what we needed. We video taped them for several minutes as they vied for the bait, and then we got ready to touch off the rockets. I asked a few fellows to get near the door so they could get to the birds as quickly as possible to avoid injury and feather loss. But when one of the guys got near the door, up popped one of the bird's head. He wasted no time getting away, taking all the others with him. It was a terrible feeling to see the entire day's work go flying off in vain.

My first thoughts were to pack up and

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head out, but then I considered all our options. The hens we had seen 13 days earlier might show up again, I thought, and so might the toms. We discussed it and decided to stay. An hour and a half later the birds appeared. It was the bearded hen trailed by 12 hungry followers. Our nemesis number was again before us, and we had already had one disappointment for the day. The birds were on the bait for about a minute, but weren't bunched properly, when in came some more turkeys.

Believe it or not, too many birds can be as big a problem as not enough, and we already had plenty of birds on the bait. As soon as the hens started to bunch I said, "Let's not get greedy," and touched off the rockets. The net zipped over the birds beautifully and trapped the hens. We took only the seven birds we needed and filmed the others as they hastily departed the area. I kept the bearded hen, thinking she might help the other six adjust to their new home.

While removing the turkeys I noticed my net was pretty worn in places and that the outer edges were twisted, causing the rockets to pull in. But it worked this one time, though, and I felt relieved that we had finally beaten the unlucky 13.

## Cover Painting by Nick Rosato

The deer is down, but there's no time for relaxing. There's the cold to contend with, along with whatever else the long winter's night has in store for the lone woodsman. *Night Vigil*, by Nick Rosato, captures the essence of hunting years ago, when hardships and dangers unimaginable now had to be dealt with almost every day. Fine art prints of *Night Vigil* are being offered by the artist. Each of the 400 signed and numbered limited edition prints measures 16 x 20 inches and costs \$43, delivered. Order from Nick Rosato, R.D. 1, Box 407, Cogan Station, PA 17728.







# *Last-Minute Luck Buck*

**By Don Feigert**

I LOOKED at my watch when I finally reached the big rock overlooking Boulder Ridge. Almost 4 p.m. The last hour of the last day of buck season. What were my chances? One in a hundred? Probably worse than that.

I looked down at the steep hollow, its snowy whiteness spotted by black rocks and boulders. The tree trunks rose tall toward an overcast sky, and my hunter's eye tried to detect the horizontal line among them that might be the back of a standing deer. I scanned the bench on the left where I'd killed a nice 4-point the previous year on opening day afternoon and the nearby seasonal run where my wife had taken the 6-point with the off-balance rack the year before that. It was good just to be here, alone in the woods, to enjoy and reminisce. Antlerless deer season was two days away, and I would be a serious and, I hoped, successful hunter then.

After about 15 minutes, two does appeared from behind boulders on my right and crossed slowly 50 yards below me. My blood began racing when I saw them stop and look back and move on and look back again, a good sign of a following buck. Sure enough, just after the does had left the scene, he appeared. He had a good-size rack and moved with the majestic walk of a mature buck in the big woods.

He was in my scope immediately and this time I didn't hesitate. I exhaled lightly, held my breath and squeezed the trigger. The 165-grain impact from my '06 thrust him sideways and down, where he lay for a few seconds, got up and ran 20 yards, then crashed to a permanent rest beside a small rock formation. He had a perfectly-balanced 6-point rack with main tines 5 inches long. Not bad for a Warren County mountain buck. I pondered for a moment how I had found success that day.

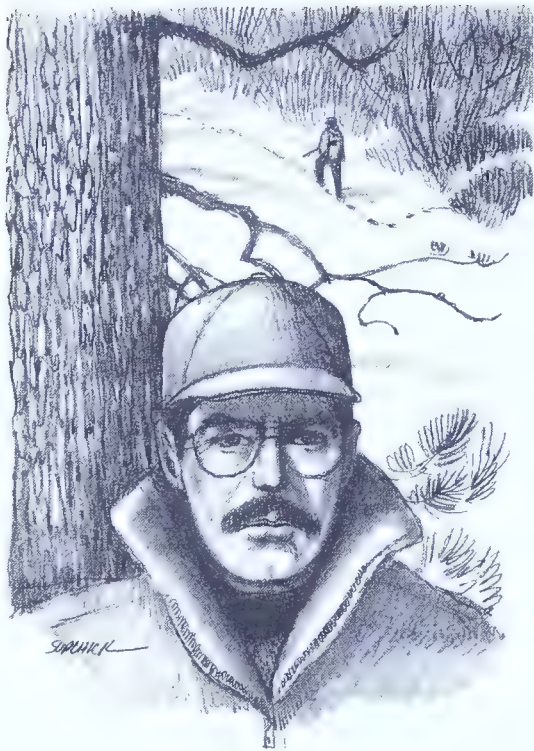
Was it my years of hunting experience, my hard-won knowledge of deer habitat and behavior, my pioneer perseverance in stalking a trophy for days? No, not this time. This time good old dumb luck, perhaps the biggest deerslayer of them all, was definitely responsible.

It was a lucky surprise ending to a somewhat frustrating deer season. I had managed to get only three hunting days off during opening week. On the first day I "almost" had my chances. It was a clear day with no snow down, and detecting brown deer against brown ground leaves was extremely difficult. My brothers and in-laws and I were scattered over a 20-acre area of very steep ridge near the top of our favorite Warren County mountain. It was a difficult area to hunt, steep and rocky, but full of deer sign and surrounded, we knew, by easier-access trails that other hunters would use to move deer in toward us.

About 7:30 I spotted two deer moving quickly through thick cover a hundred yards above me. The second deer looked suspicious, and I thought I glimpsed a quick reflection of antler in the sun, but couldn't be sure. Within seconds the deer were well past me and heading directly toward my younger brother Ray's "rock", a house-size boulder perfectly placed on the overlook edge of a large bench. A few minutes later a single, confident shot rang out, and I knew Ray had his third consecutive annual buck. A 4-point, it later turned out to be, with a nicely curved rack.

During the next several hours I saw only a few deer, but I stayed put at my selected stand. I had found success here in previous years, and all the pre-season scouting favored this exact area of this ridge.

Early in the afternoon I saw a doe moving toward me at an angle from be-



low, and I somehow sensed, then saw, a buck trailing her. They were obviously on the escape, probably circumventing a hunter lower on the ridge. I could tell immediately that he was a large buck with a good rack, and he was coming right at me without the usual whitetail caution, getting just now within 200 yards. I followed him briefly in my scope, letting him get maybe just a little bit closer. Suddenly, he leaped diagonally and charged down the mountain-side. In a few seconds I lost him among the trees. I couldn't believe it! I knew I hadn't spooked that deer. I looked around and there was my brother-in-law Restless Jeff, the walker, 6-2 and 230 pounds of blaze orange "sneaking" along a trail above me. I decided right then to have a word with Jeff that night.

Ten minutes after the buck disappeared, I heard a rapid-fire burst below me and a few hundred yards to my left. It could only be my other brother-in-law and his 270 Remington pump gun. He was claiming a beautiful 7-point that might have been mine.

When I got back to camp that night, I learned that my older brother had killed a deer with unusual 9-inch forward-

I COULDN'T believe it! I knew I hadn't spooked that deer. I looked around and there was my brother-in-law, Restless Jeff, "sneaking" along the trail above me. I decided right then to have a word with Jeff that night.

curving spikes. I was a little dazed by all this success and my lack of participation in it, but I overcame my envy and enjoyed the camp celebration of good hunting. I would have another chance the next day.

That night, however, brought incredible changes in weather. The mercury plunged, 8 inches of snow accumulated on the mountains, and then temperatures quickly rose again. By 7 a.m. a rare downpour of freezing rain was driving animals and hunters alike into cover. I stayed out all day, watching ice cake my eyebrows, and saw a total of two deer and only three other hunters who were as stubborn (or stupid) as I.

I had to work the next few days, but on Saturday I took my wife Patti along as a hunting partner. She had been unable to get off work for the entire first week, so for her this was opening day. The weather was beautiful: calm and cool, with a dusting of snow. We did some morning stand- and stillhunting, worked cover toward each other all afternoon, saw 12 deer, and very much enjoyed a day on the mountain, but no antlers were spotted.

That made three full days out for me and not a shot fired. Patti and I both had to work the following Monday through Friday, so we were pretty much resigned to using our Warren County antlerless licenses to get a deer that year.

In fact, we decided not to hunt during the final day of buck season. We were expecting eight guests at camp Sunday for the antlerless deer season, and we had all of those last-minute errands and shopping tasks to do at home before we even made the trip up. We enjoyed the rare luxury of sleeping in until almost 9 o'clock Saturday morning and then later took our time packing and preparing gear. Around 11 we stopped over at Dad's house for coffee.



My parents live in extreme western Pennsylvania, in a rural area of low hills and small farms. We have hunted rabbits and squirrels for decades in the woodlots near my parents' property, but never deer in those comparative flatlands. We hunt big game *in the mountains*, two hours north and east. Deer do live on those farmlands, however, and many are taken by teamwork drives through the woodlots.

We were sipping coffee in the dining room at the back of the house, where sliding glass doors open onto a deck overlooking fields and woods, when we were surprised to hear shots. A doe appeared, running at top speed across the open field, and then three others, and finally a magnificent farm-fed buck with a huge rack, followed moments later by a group of scurrying, orange-clad hunters.

That did it. Buck fever struck me hard, completely taking over my brain. I grabbed Patti by the hand and literally dragged her to the car. We dashed home, where I finished packing like a madman, and before noon we were on our way. Patti didn't say much through all of this frantic activity; she knew there's not much you can do to stop a deer hunter possessed by the fever.

It was 2:30 by the time we arrived at camp and going on 3 p.m. when Patti dropped me off (still shaking her head in knowing wonder) at the fire trail that runs along the base of our mountain. We both knew it would take me nearly an hour to climb to the top and settle into that stand above Boulder Ridge. Neither



THE WHITE-TAILED DEER is the eighth species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for non-game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patches of the snowy egret, bluebird, bobcat, kestrel and elk are still available: those of the osprey and river otter are sold out. Decals (\$1 each) are available for all but the egret and deer. Order from the Game Commission, Department AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.

of us dreamed that a beautiful 6-point would promptly walk into my scope.

There's a lesson in all of this, I guess. Learn as much as you can about deer habitat and behavior. Scout your hunting territory thoroughly every fall and practice fine-tuning your hunting tactics and shooting skills, and you'll take many fine deer and enjoy much outdoor pleasure. But don't be surprised or ashamed if someday a last-minute luck buck stumbles into your path. Maybe your time will be due, as mine was.

### Pennsylvania Deer Expo '89

The Pennsylvania Deer Expo '89 will be held in the Sewall Arena at Robert Morris College, just outside of Pittsburgh, from Friday, February 24 to Sunday, February 26. Seminars on many deer hunting subjects will be given; auctions of hunting and fishing trips, wildlife art and jewelry, and many other items will be held; and exhibits by outfitters and manufacturers will be on display. Many outstanding trophies, including Dick Idol's famous collection of whitetail heads, will be an Expo highlight. Admission will be \$5, children 12 and under, \$2.50.



**SASSAFRAS** is a medium-size tree. It's easily identified by its three different configurations of leaves. Some are elliptical, some are two-lobed, and others are three-lobed. Most people have heard of sassafras, but relatively few have tasted it.

**Yesteryear's wonder drug . . .**

## **SASSAFRAS**

**By Jim Hayes**

**O**N THE Bedford County farm where I spent my childhood summers we carried our drinking water in buckets from a mountainside spring which surfaced at the base of a sassafras tree. Waist-high saplings, offshoots of the parent tree, surrounded the spring except for an access trail we kept open by uprooting the shrubs. I distinctly recall pinching sassafras leaves between my fingers and sniffing the aromatic aroma.

My grandmother always claimed that that springwater was the finest she ever tasted and that it cured everything from warts to constipation. I'm not sure if she was right or not, but I do know that it *didn't* spare us from poison ivy. Nevertheless, Grandma was convinced that drinking water from the sassafras spring

was the secret of her longevity. And it's a fact that she remained spry and active until well into her 90s.

The sassafras, *Sassafras albidum*, is a medium-size tree. A member of the laurel family, it occurs from New England to Florida and inland as far as Texas and Iowa. Sassafras is easily identified by its three different configurations of leaves. Some are elliptical, like shagbark hickory, some are two-lobed, mitten shaped, and others are three-lobed double-thumbed mitten. Mature trees may reach heights of 50 feet, and the lateral roots tend to send up knee-high to waist-high saplings.

Sassafras is so common throughout much of Pennsylvania that hikers and other outdoorsmen pass it by without a glance. Yet when the first Spanish and



**AFTER CLEANING the roots, use a sharp knife to cut off wood shavings. Boil a handful of the shavings in water sweetened to taste until it turns reddish, and steep for ten minutes.**

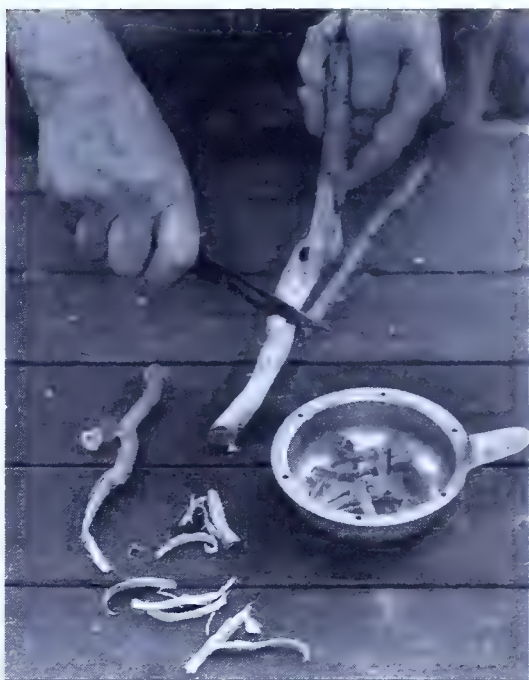
English explorers arrived in the New World and learned of its medicinal value from the Indians, sassafras was one of their most exciting discoveries. In fact, it was one of the first plants exported from here.

Most people have heard of sassafras tea, probably from their parents or grandparents. But it's a safe bet that relatively few have tasted it, unless they're natural food faddists, and fewer still drink it regularly. In considering sassafras as a beverage, and for its reputed medicinal qualities, it's important to keep its use in historical perspective.

In Colonial America the popular beverages—besides water and milk—were cider, beer, rum and wine. Most were produced locally. Tea had to be imported, and it was costly and sometimes in short supply, especially during the Revolution. Sassafras, on the other hand, was used as a herbal medicine and a palatable substitute for imported tea.

It should be remembered that the American Revolution was precipitated in part by the Tea Act imposed by the British Parliament in 1773. The measure was intended to monopolize the tea trade and curtail the smuggling of tea into colonial ports on Dutch ships. At that time the colonists were boycotting British tea because it was subject to a revenue tax—a tax imposed by a British Parliament in which the colonies had no representation.

Obviously, if the colonists had preferred locally available sassafras tea to imported tea, the Boston Tea Party would have amounted to no more than a tempest in a teapot. But under the Tea Act, when the British began offering tea at a lower price than smuggled Dutch tea, the colonists realized they'd been royally fleeced and that their boycott would no longer be effective. Thus, on December 16, 1773 a band of colonists disguised as Indians vented their frus-



tration by boarding British ships and heaving their tea cargoes into Boston harbor. The uprising became a rallying point for the issue of "taxation without representation" and led to imposition of the Intolerable Acts of 1774.

Does America owe its independence to a preference for imported tea over sassafras tea? Probably not, but the tax on imported tea was one of the grievances that gave impetus to the First Continental Congress of 1774 and the Battle of Lexington in 1775.

### **Reputed Medicinal Value**

As for the reputed medicinal value of sassafras, it must be kept in mind that public health in Colonial America—and for years thereafter—was poor by modern standards. Epidemics were common and doctors were few. Many people suffered from illnesses for which there were no known treatments except the herbal medicine lore practiced by the Indians. Commonly used remedies were quinine, tobacco leaves and the roots of ginseng and sassafras. Sassafras was either chewed or brewed into tea as a "blood purifier" and to treat gout, arthritis, rheumatism, dysentery, stomach disorders, nervousness and ague or swamp fever (malaria).

Today, advances in pharmacology

have relegated sassafras to the same category as ginseng, aloe vera, wild ginger and other folklore medicines. If it has any curative benefits, science doesn't know why.

In 1976 the U.S. Food & Drug Administration (FDA) imposed a premature ban on the commercial distribution of sassafras roots after determining that the essential ingredient, safrole, could cause liver cancer in laboratory rats. The ban was lifted after further research showed that a person would have to drink more sassafras tea in a single day than one would normally consume in a year to inject the concentrations of safrole used to induce liver cancer in the hapless rats.

The FDA fiasco would seem to demonstrate that sassafras is reasonably harmless when used in moderation. Dried sassafras root is sold in most health food stores and is available from natural food mail order firms. Sassafras is certainly innocuous compared to many more potent plants, shrubs and roots.

If you'd like to get better acquainted with sassafras try sniffing a crushed leaf, chewing on a twig or adding a few tender young leaves to a salad. Roots to make tea may be gathered by uprooting saplings, which will be replaced by new shoots, or by digging for laterals at the base of a mature tree. If you dig your own roots the larger ones may be covered with bark which should be peeled off to expose the rosey-hued inner wood. The roots have a root beer-like aroma.

After cleaning the roots, use a sharp knife to cut off wood shavings. Boil a handful of the shavings in water sweetened to taste until it turns reddish, and steep for 10 minutes. Honey or maple syrup may be substituted for sugar as

sweeteners. Don't expect the brew to taste anything like supermarket or gourmet shop tea. Some people find sassafras tea has a medicine-like taste. If so, that's probably because they previously used a medicine, such as cough syrup, to which sassafras oil was added for flavoring. Nevertheless, a glass of iced sassafras tea on a hot summer day is thirst satisfying and a pleasant, low calorie novelty. Being caffeine-free, it lacks the stimulating effects of pekoe tea.

Sassafras is also used to make jellies and candies. The leaves can be dried and crushed for use as an ingredient in Creole cooking. Some natural food stores offer sassafras hard candy, candy sticks and sassafras oil flavoring in addition to the roots. Dried sassafras root is said to be an effective moth repellant, comparable to cedar.

The sassafras is such an attractive tree it seems odd that it isn't used more widely in landscaping, along with birch, dogwood, laurel and blue spruce. Many mail order nursery firms market a variety of shade and ornamental trees, but I have yet to find one offering sassafras. If you have the patience, however, the trees can be started from seed, using the dark blue berries that mature in late summer and early fall. The trees thrive in full sunlight or partial shade, and are tolerant of marginal soil conditions.

As both a beverage and a medicinal tonic, sassafras may be overrated, but as a tree it's a stunning tribute to God's handiwork. I'm fortunate to have several sassafras trees growing in my backyard, and I never admire them without reminiscing on the sassafras spring that provided us with refreshing water in my boyhood days. At that time, before modern refrigeration, mountain springwater was the coldest sensation we could experience, and believe me, it was *great*!

## Thoughts While Walking

*A fanatic is one who can't change his mind and won't change the subject.*

—Winston Churchill



# MUSIC in the TIMBER

By Charles E. Travis, Jr.

**I**T WASN'T an ideal night for coon hunting, but we had just had a new hound shipped in from Illinois and were trying him under whatever conditions came, favorable or not. A full moon was just coming up over the timber across from the house as my young son Charlie and I went up to the pens to get the hounds. Tonight we were taking the new hound, Red, a chunky 60-pound Redbone, and Boomer, a 6-month-old registered Black and Tan.

After loading the hounds into the pickup we headed for a piece of timber a short drive away. It wasn't long before we reached our destination, and while Charlie lit the lantern I popped the tailgate and turned out our two hounds. The red hound went hunting in an instant as we headed down through the timber towards a small creek.

We decided to hunt this piece of timber because it was known to harbor some smart old coons that had fooled the local hounds on a number of occasions. We had the Redbone hound on trial and if he treed one of these coon we could feel sure he was a legitimate coon dog. Though he was already assured of a home for the rest of his life, guaranteed by his performance on two previous nights in two other sections of the county, tonight would be the clincher.

It wasn't long before the stillness of the night was shattered by a throaty bawl. Red had struck a cold track about 300 yards down the creek from us. Red is a fast drifter and was only opening



**IT WASN'T an ideal night for coon hunting, but my young son Charlie and I were trying a new, chunky 60-pound Redbone under whatever conditions came, favorable or not.**

now and then but was working the line out bit by bit. As we got nearer to the creek we could hear him sloshing around as he drew the scent from the coon's feed trail up into this keen nose, then let out one of those deep horn bawls. I think my young son described it about right when he said, "Daddy, Red sounds like the horn on a diesel train."

## Wise Old Ringtail

The trail left the creek and led out into a field of corn stubble where the wise old ringtail had gone to feed on the corn missed by the mechanical picker. Red sure had Mr. Ringtail's number by this time and was bawling at every jump. The pup was all excited but didn't know quite what to make of it as he would run out and follow the old hound for a while and then come back, then go out again. Frankly, I think he was afraid of getting lost out there in the dark.

The track was getting warm by now and left the cornfield for the creek again. After trying to shake the hound

off his trail in the water, the coon headed for the deep timber and it was shortly after leaving the creek that we heard the sound dear to all followers of coon hounds, the "up" bark. In this case a deep, heavy chop as steady and rhythmic as a ticking clock. As Charlie and I made for the tree I glanced at my watch, the race had lasted nearly an hour from strike to tree.

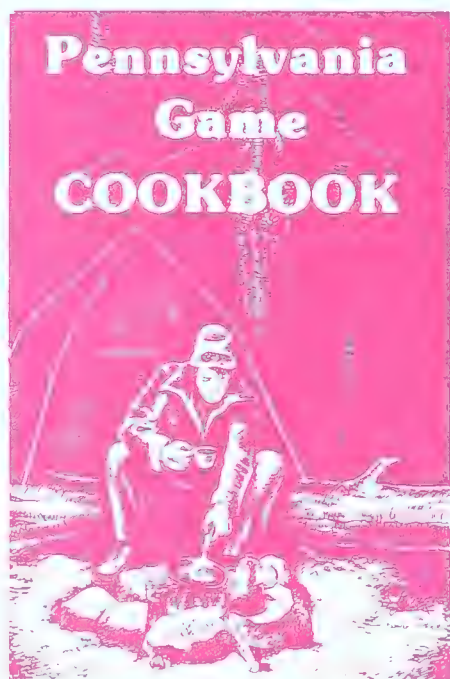
When we arrived at the tree we found Red had both front feet up on a huge poplar tree, which was about four feet through at the base. It was nearly 60 feet to the first limb. Setting the lantern down I threw the beam of the big flashlight over the limbs, searching for Mr. Coon. The first hurried once-over failed

to produce any eyes. Then I went over the tree bit by bit, but still nothing showed. Red was still telling us the coon was up there and we had faith in him. There was another big tree leaning against the poplar and we began to think the coon had come down this one and gone on. So we led Red over and searched all around the base of the other tree but still he went back to the big poplar and looked at us as much as to say, "What's the matter with you guys, old Ringtail is up this tree."

Well, after some careful searching we found a den near the top, in the end of a big limb. It was almost impossible to spot this den from the angle the light shone on it. We praised the hound and gave him a few hearty slaps on the ribs, then went looking for another coon.

We made our way down to where the creek forked and then we started up the other branch. About 20 minutes later Red struck again, only this time it was a warmer track, we could tell by the sound of his voice. Red came to us recommended to have a wonderful bawl mouth. The only thing I can say is that his former owner was too modest in describing his hound. This race lasted but half an hour before the coon took to a tree as the hound closed on him.

As we walked to the tree we hoped, for the hound's sake, that the coon was on the outside. We knew full well, though, that this piece of timber was noted for its smart coons and many den trees, so our hopes weren't permitted to soar too high. However, when we came under the tree we saw that it was a very large oak and appeared to be solid. Sure enough, after a bit of searching with the big light, the coon was spotted, crouched in a crotch up near the top of the monster oak. He was a wise rascal, though, and wouldn't show his eyes. Red seemed to sense that the coon would soon be knocked out for him to finish and the pup was sitting there looking up like he knew what it was all about. Charlie was carrying his single shot 22 rifle and I took it, expecting to knock Mr. Coon out in short order. Two shots later, however, he was still in that crotch.



**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by GAME NEWS readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from GAME NEWS office.



That's when Charlie said, "Daddy, I believe I could hit him." I sure wasn't doing any good so I turned the rifle over to him. The youngster put a cartridge in the chamber, closed the bolt and steadied the rifle against the side of a small tree. When the little rifle cracked I heard the thud as the bullet found its mark, and the coon came crashing down through the branches, almost landing on the pup. The Redbone had the coon in an instant and to quote Charlie, "Wrung him out like a dish rag." I was sure proud of my son's fine shot, his first on game, though he had shot a bit on the target range. Charlie carried the coon over his shoulder as we headed back to the truck.

We had Red on the leash as we left the timber, as the next day was a school day and Charlie had to get to bed. As we entered a corn field Red started to wimper and rapidly search the ground. We knew that a coon must have just passed. Sure enough, in a moment or two, Red let loose with a thunderous bawl. I slipped the leash and he was on his way. Just before he struck we heard a train coming up a grade to our right. It was slowly dragging the hill, so we knew it was hauling freight. Fortunately, the coon had taken off in the opposite direction.

Before following the hounds we waited to see if the coon would circle, but we were handicapped by the train making so much noise that we were unable to hear the hounds. Just as the long freight was past, a fast passenger train came by on another track, going in the other direction, but it was past in a flash. Then we could hear Red's booming

bawl voice over in the next hollow where there was another patch of timber.

We left the corn field, crossed a pasture and entered the timber. When we topped the next hill we heard that sharp, heavy chop that told us the coon was up. We made our way to the tree but didn't hurry as my little coon hunter was very leg weary. Anyway, we knew Red would remain at the tree even if it took us all night to get there.

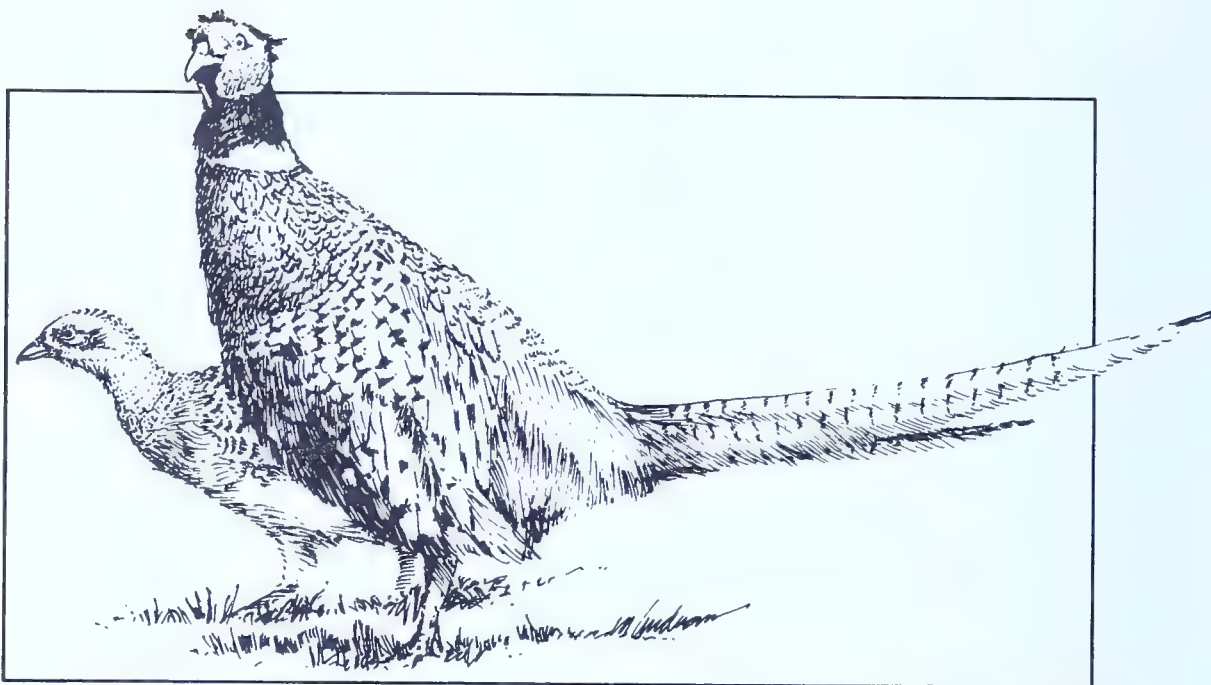
### **Almost Like Twins**

When we did arrive we found another poplar. In fact there were two of them growing about six feet apart. They must have started life together in the forest floor as they were almost like twins. Tangled around the base of these two forest giants were two other large trees felled by the hurricane that went through this section a few years ago. Added to this is a mass of saplings of various sizes. Red was up on the tree to our right as we approached, wagging his tail and giving out his rhythmic "up" bark.

We didn't have too much trouble finding this coon as he was one of the biggest we had ever seen. He was clear to the topmost part of the tree, stretched out full length on a limb about as thick as my arm. He was really a big coon. As the beam of the big light hit him, he turned his head and looked down, his eyes glowing like coals. As it was late in the season we left him there as valuable seed for next season and the seasons to come. We snapped the leads on both hounds and headed for the truck once again, more than pleased with the night's hunting and our new hound.

### **Use 800 Numbers**

Use the agency's new toll free (800) numbers to contact a wildlife conservation officer; their home phone numbers are no longer being published. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral Region, 1-800-422-7551; Southcentral Region, 1-800-422-7554; Northeast Region, 1-800-228-0789, and Southeast Region, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.



**MY HUNTING** career began in the late '50s when the ringneck was king. Times have changed since then, however, and when it comes to hunting, I've changed my priorities.

## *Changing Priorities*

**By David H. Cooper**

**M**Y WIFE tells me I should have been born earlier, at a time when man was exclusively a hunter. She says anybody who loves hunting as much as I do would be happier as a Neanderthal Man or Susquehannock Indian.

### **Might Be Right**

She just might be right! I would be right at home stalking over the hills of Pennsylvania with a spear or bow and arrow, in search of the woolly mammoth. But since those critters no longer exist or can't be hunted legally here, I'll have to be content with whitetails and my first love, small game.

My hunting career began in Montour County in the late '50s when the ringneck was king. The Washingtonville area took on an almost circus atmosphere on the opening day. Hundreds of canvas covered hunters converged on this small community in search of the wiley ringneck rooster. They were seldom disappointed. A nearly continuous

barrage of shots lasted from the nine o'clock opening until sometime around noon. By then, most nimrods had at least one bird in the bag, and had expended a considerable amount of powder in the process.

Each year as the small game season drew near, the excitement in our school among the hunting fraternity reached almost fever pitch. The most popular kids at such times were those who lived on farms, preferably one with a healthy flock of birds. Even homely farm girls from known ringneck hotspots now received the adoring attention of many a shotgun toting boy. Fortunately for me, one of my friends, Jim Cotner, lived on a working farm near Washingtonville and he usually invited me to hunt. We never failed to get our share of pheasants.

Those carefree high school days ended in 1962 when I was graduated from Danville High School and entered the U.S. Air Force. When my enlistment ended I took advantage of the G.I. Edu-



cation Bill and attended Bloomsburg State College for another four years. Then, 1970, I became a teacher.

During these eight years, a startling change in the pheasant population took place, not just in my favorite hunting places, but throughout the state and nation as well. Unfortunately, the change was a negative one. Locally, PP&L built a coal-fired power plant right in the middle of some of the finest ringneck habitat in the state. Gone were many of the farm acres and consequently the birds that had attracted hunters for many years. Interstate 80 was now completed through Montour County. It became easy for those living in urban communities to reach our area in just a few hours traveling time. Many of them purchased land here and promptly posted their grounds with trespass notices. The soil bank program which had kept many acres from being plowed ended. Clean farming techniques began. Hedgerows were removed and lowlying areas were drained and plowed. Farmers began using herbicides and insecticides rather than cultivating weeds. As a result, the number of pheasants plummeted. Even with my two, well trained Brittany spaniels, it became increasingly difficult to find even one rooster where there had once been dozens.

Many small game hunters threw in the towel and either quit hunting completely or became turkey hunters instead. I tried turkey hunting a few times, but I never could get interested. There was too much sitting around with too little action to suit me. I was and am a dyed-in-the-wool small game hunter and I wasn't about to quit.

I changed priorities. The animals I used to take incidentally—squirrels, grouse, doves and rabbits—became my primary quarry. I found that I had been missing some great hunting experiences by concentrating almost exclusively on ringnecks.



Hunting gray squirrels with a 22 rifle is a most challenging sport, and the meat is downright scrumptious. Jump shooting doves is a super way to spend a balmy September afternoon. And hunting ruffed grouse in October and November is pure joy.

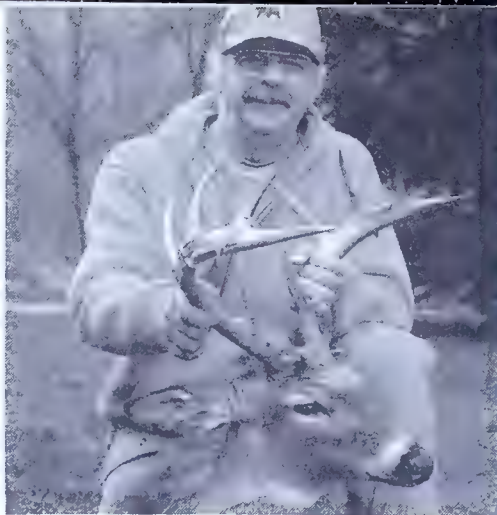
Of all my new found experiences, rabbit hunting, especially during the late season, is the most enjoyable. I almost always find enough bunnies to make for an enjoyable day afield.

When I first started hunting rabbits seriously I used the same shotgun I had been using for pheasants, a 12-gauge semiautomatic Browning bored full. I soon discovered, however, that what had been a deadly combination on wild flushing pheasants wasn't too hot on rabbits and grouse. I either missed them completely or in many cases mangled them badly. I solved those problems by having the barrel cut from 30 to 26 inches and then having an interchangeable choke system installed. Shooting low base loads of 7½s from the improved cylinder tube increased my kill percentage dramatically.

Once in a while I'll run across a ringneck pheasant while hunting rabbits, and I find myself longing for those by-gone days when pheasants were indeed "king." Yet while I'm afraid those days are gone forever, hunting such a variety of other animals has certainly more than made up for them.



**ALTER MILLS**, above, Mayfield, used a Remington 30-06 to drop this 170-pound point. Glenn Gaye, below, Windber, topped this trophy in the farmlands of Somerset County.



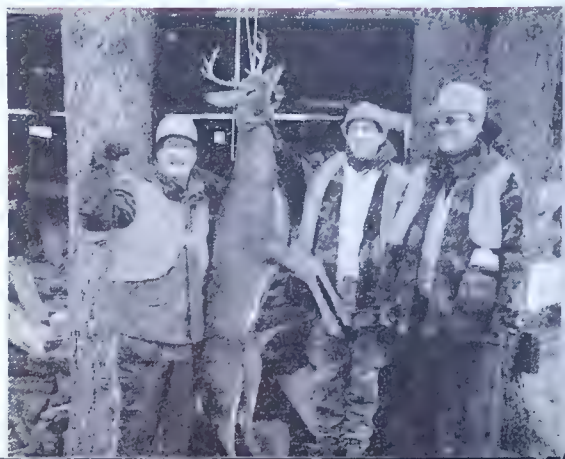
**JOHN WILSON**, above, Sinnamahoning, stayed in Cameron County for this 16-point. Michael Bytof, Jr., below, is proud of his first buck, a Clinton County 11-point.



**CRIS SIMPSON**, Randy Heasley, Chum Medger, Mike and Mark Selman, Chuck, Wally and Bob Simpson, and Bill Shear, had a great opening day hunting from their Jefferson County camp.



**GREGORY HERBINE**, center, Emmaus, is proud of his first buck, this Clinton County 8-point, but so are his Grandfather, Bill, and his Dad, John.



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# IT TAILS ALORE

From the Locust Ridge Camp, Bedford seven bucks during the first two days of season. Kneeling, left to right, are Ken Williams, Randy and Ted Willison, Bruce Robby Willison and Randy Engle. Standing are Bob Robertson and Bob Willison.



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OKAY, LADIES. DORIS BOERNER, Chalfant, who took this Bucks County deer with 13-inch spikes, wants to see a center spread featuring women hunters and their deer. Send your pictures to GAME NEWS.



RAYMOND RIBBEE, above, North East, took this deer in Erie County. Mike Chilek, Dickson City, shows off his first buck, a Lackawanna County 8-pointer.







# FIELD NOTES



## Sign of the Times

**TRAINING SCHOOL**—One of the first things I learned from WCO Robert Prall, Berks County, is to make sure to close my vehicle door when releasing pheasants. Bob left his open while we released some birds, and on returning to his car he found a nice whitewashing job down the inside of his window.—Trainee L. L. Spotts.

## Glad To Do It

**TRAINING SCHOOL**—I was on field assignment when Crawford County WCO Dave Myers took me with him to visit Safety Zone Cooperators. When we stopped at Sid Martin's we didn't find him at home, but looking around we found him behind the barn, helping a cow that was having a hard time giving birth. Dave and I offered to help—it was obvious Sid could use some—and he readily accepted. When it was all over, Sid looked over at Dave and me cleaning ourselves and said, "Boy, you guys will do anything to keep land open to hunting."—Trainee Jerry Bish.

## Bad Combination

**TRAINING SCHOOL**—It seems most bear problems are created by people, not bears. During my training assignment in Indiana County, WCO Mel Shake and I received a report of a bear killing a dog. While talking to the dog's owner over the phone he told me that the problem bear was a frequent visitor to his residence. It wasn't until we visited the scene that we learned why. The bear was simply doing what bears do best, following its nose to a food source, in this case, the man's garbage bin. Unfortunately, bears are good dog attractors.—Trainee Stephen S. Hower.

## Common Peril

**CAMERON COUNTY**—The way hawks and owls can coexist in the same area—one hunting by day, the other by night—is an example of how nature reduces competition among animals. John Dolan, Emporium, however, recently saw this adaptation backfire. He was working at Mallery Lumber when he noticed a ball of fire and smoke come from the top of a utility pole. Upon investigation he found a Cooper's hawk lying on the ground, right beside a barred owl similarly electrocuted the night before. Each had used a shortened perch to hunt from and each suffered the same fate.—WCO Joe Carlos, Driftwood.



## Never Forget It, Either

**ADAMS COUNTY**—Deputy Clarence Cluck, Jr. and I were archery hunting, but only 15 minutes after taking our stands I noticed him hotfooting it back to his house. It turned out the dead snag he had chosen to stand by was inhabited by a colony of red ants. I'm sure Clarence now has a new meaning for the old phrase, "ants in your pants."—WCO Mike Dubaich, Aspers.



## Rapid Pace

**TRAINING SCHOOL**—I learned a lot during my first month of field assignment, but what impressed me most was how much the WCOs can squeeze into their limited time.—Trainee David E. Beinhaur.

## Let 'Em Know

**TRAINING SCHOOL**—Now that the major hunting seasons are over, now is a good time to show your appreciation to the landowners who permitted you on their properties. A card or small gift would certainly be appreciated and definitely be worthwhile.—Trainee Joseph V. Stefko, Jr.

## The Key

**TRAINING SCHOOL**—During my first field assignment, in Cumberland County, I was amazed at the number of violations we learned of through tips from sportsmen. We weren't able to make cases out of all the tips, but it sure was gratifying to find so many people with the desire and courage to get involved. Keep up the good work.—Trainee Richard Larnerd.

## Side Benefit

**POTTER COUNTY**—Three fellow officers and I were returning from a conference when we stopped at a restaurant for supper. While ordering I jokingly told the waitress that WCO Dick Curfman—whose white hair belies his age—was a senior citizen. Later, while paying our bills, Dick started to laugh; the waitress had given him a senior citizen discount.—WCO Ron Clouser, Galetton.

## Feel At Home

**ELK COUNTY**—In a month or so many of you will be receiving a new member or family to your community, a new conservation officer, fresh out of the training school. Starting a new career in a new town is difficult. You could be a big help by extending a friendly greeting, and by inviting the new residents to your local sportsmen's club, fraternity meetings and church.—WCO Dick Bodenhorn, Ridgway.



## Scrounging

**CENTRE COUNTY**—Bears had been visiting the dumpsters at Poe Valley State Park all summer, but other than making a mess, they were causing no problems. That was until a couple of cubs got big enough to crawl into the dumpsters, just like mom. Even that was no problem until one day when they crawled into an empty dumpster and couldn't get out. Dana Harlan, the park ranger, came to the rescue. He placed a long plank in the dumpster so the bears could crawl out. He returned after a half hour and found the cubs gone. Unfortunately, somebody had come along and helped themselves to the plank.—WCO George Mock, Coburn.

## Good Exercise

**SOMERSET COUNTY**—One cool drizzly day last fall I decided to eat my lunch at Laurel Creek State Park. I went to a boat launch at the upper end of the lake and noticed lots of cedar waxwings. The birds were flying and landing close by, so I grabbed my camera. Just as I started to take some pictures I noticed a deer swimming down the middle of the lake. It just swam from one side to the other and back, then it swam in a circle and headed for shore. Once there it stood half out of the water, seemingly thoroughly refreshed, and then slowly walked away. Oh yes, I did get some pictures.—WCO Daniel W. Jenkins, Somerset.



### It's Quick, Too

**TRAINING SCHOOL**—On a day off, WCO Al Scott and I went goose hunting at Pymatuning. We didn't get any birds, but the trip was, nonetheless, educational. As Al was walking toward me through the swamp I warned him of some deep holes in front of him. He avoided them all but the last, and ended up with a hip boot full of water and mud. That's one method of taking soil samples they never showed us at the school. —Trainee Edward B. Steffan.

### Logical Name

**ERIE COUNTY**—I always enjoy the comments of youngsters, especially on how they perceive a uniformed wildlife conservation officer. For example, every time I pull in at Deputy George Hido's house I hear his two grandsons yell out, "Here comes the deer man." —WCO Shayne Hoachlander, Albion.

### It's a Buck, Mom

**BLAIR COUNTY**—Deputy Sam Dunkle told me about a lady, Ann Gilliland, who was getting rather concerned one evening during archery season. Her 14-year-old son Brian was out hunting with his grandfather, but it was getting late. Then the phone rang. It was Brian, calling to make sure Mom would be home when he arrived with his deer—his first. Brian, of course, was excited, but Mom must have been, too, because her first question was, "Is it a duck or a boe?" —WCO Steve Kleiner, Altoona.

### Spare Those Stream Banks

Several months ago we launched a new conservation project called "Streamside Fencing," a cooperative 10-year program funded by the Game Commission and the U.S. Fish and Wildlife Service. Through it we're trying to demonstrate how landowners can reduce soil erosion, improve water quality, and provide wildlife habitat by fencing livestock from stream banks. I'd like to take this opportunity to thank Farm Game Manager Roger A. Romesburg, for making the arrangements, and landowners Ernest L. VanTassel and Sidney W. Riggs for allowing us to use their three farms for establishing the Southwest Region's first demonstration sites. —LMO Barry K. Ray, Sr., Rockwood.

### Fortunate Timing

**YORK COUNTY**—Deputies Dean Fromm and John Heltzel were patrolling on the opening day of small game season when they met an elderly man and his grandson. They were standing next to a tract of land where they had hunted before, but it was posted this time. They had been trying to find out who owned the land but were having no luck. During the conversation the landowner drove up and asked the deputies to check for trespassers. After informing him that trespass violations are not under the jurisdiction of the Game Commission, the deputies asked him why he had posted his land. He said he just wanted to know who was using his property. At that point the elderly hunter asked for permission and immediately received it. Then the hunter went on to explain that he had had some misgivings about the Game Commission because of a minor violation he was involved with several years ago, but that he had just taken them all back because we had opened the door for him and his grandson to hunt on the private property. —WCO Robert L. Yeakel, Red Lion.



## Costly

**MONTGOMERY COUNTY**—I recently received my worst damage complaint in my 14 years with the agency. Mr. Belitto, Norristown, who raises and trains racing pigeons, had a raccoon get into some of his pigeon pens and kill \$2500 worth of birds. —WCO William Wasserman, Montgomeryville.



## Valuable Learning Experience

**TRAINING SCHOOL**—I was on field assignment in northern Dauphin County when WCO Scott Bills took me to a farm to show me a barn owl. He told me to watch for the owl while he walked toward the silo. As Scott got close the beautiful bird flew out, just as he had predicted. Scott then called me over and said two more were inside. I peaked in the silo—at his suggestion—and was immediately “baptized” with owl droppings. —Trainee Donald R. Burchell.

## Finicky Browser

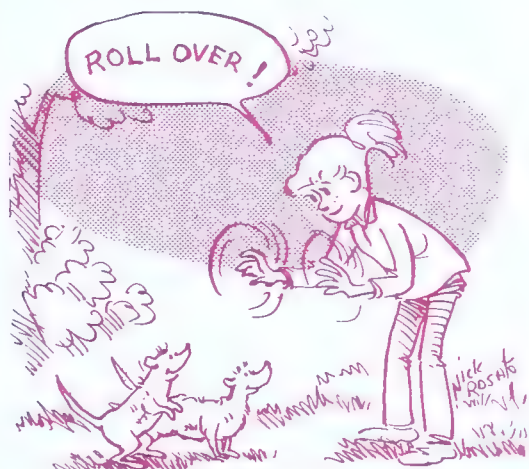
I found many instances last September where bears had pulled down cherry trees to get to the berries. Bob Lehr, his wife and grandchild, however, saw something similar but much more interesting. They watched a doe reach up, grasp and pull down a cherry branch with her teeth, pin it to the ground with her hoof, and then devour all the berries. The child must have found it especially amusing because his spontaneous laughter quickly had them all joining in. —LMO Stephen L. Opet, Tamaqua.

## They Should Be

**WARREN COUNTY**—I’d like to take this opportunity to thank the deputy wildlife conservation officers for their outstanding efforts on behalf of the Game Commission. Given our current restricted working conditions, it’s difficult, at best, to adequately service a district. Without our dedicated deputies it would be impossible to administer the agency’s many programs. I only hope the sportsmen and other citizens are as appreciative as I am. —WCO Bill Schultz, Youngsville.

## Nice Gesture

**CLEARFIELD COUNTY**—Safety Zone Cooperator Harold Altemus recently told me that last year a group of nonresident hunters stopped and got permission to hunt on his property. They returned several days later and presented Harold with some gift certificates from a nearby restaurant so he and his wife could go out to dinner. Needless to say, everybody benefited. —WCO Don Zimmerman, Drifting.



## Comes Naturally

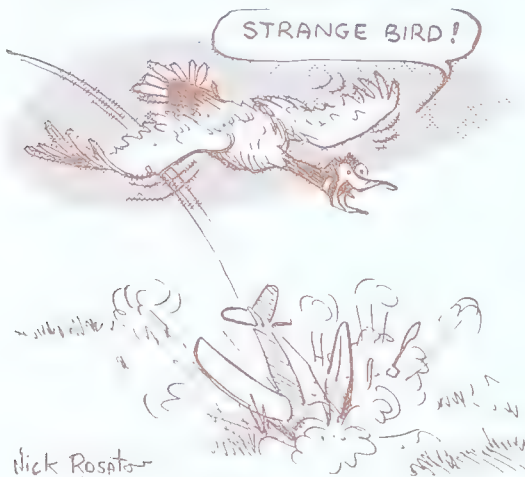
**PERRY COUNTY**—My daughter Holly raises most of the orphan animals I receive, and like most 12-year-olds, she gets attached to them all. When I told her that two young opossums she was raising were about ready to be set free she responded, “Not yet, Dad, they haven’t learned how to play dead.” —WCO Jim Brown, Loysville.

## Good Practice

**WASHINGTON COUNTY**—Waterways Conservation Officers Keith Small and Ray Pecuch, along with my son Nathan and I were driving golf balls at a local driving range when we were treated to one of nature's many comical antics. For about an hour we watched a pair of large owls take turns swooping down and catching each ball as it rolled to a stop. They even made quite a racket while playing their game. I sure wouldn't want to be a white mouse in the territory of those two avian predators. —WCO R. Matthew Hough, Washington.

## Back in the Classroom

**TRAINING SCHOOL**—I would like to take this opportunity, and I know I'm speaking for the entire class, to thank all the officers who provided us with guidance and instruction during our field assignments. —Trainee John A. Morack



## Pay Attention

**ARMSTRONG COUNTY**—Last August a Canada goose distracted a pilot, causing his airplane to nose dive into the ground. Although the plane was demolished, nobody was injured, and the accident didn't even make the local papers. I learned about it only because my Dad was the pilot. He suggested that I should keep the geese under better control, but I told him he'd just have to accept his pilot error and be more careful while he's flying his remote controlled model airplanes. —WCO Barry Seth, Worthington.

## All Wet

**WESTMORELAND COUNTY**—I was listening to my radio scanner one night when I heard my neighboring officer apparently luck into a late night spotlighting case. After a careful approach, he found not a spotlihter, however, but a golf course maintenance crew turning on water sprinklers. —WCO R. D. Hixon, Ligonier.

## Grateful

Regional Forester Don Little and I were walking through a newly acquired parcel of SGL 79, near Revloc, when a 6-point buck ran up to us. We were surprised when he stayed within 20 or 30 feet as we made our rounds, and all we could figure was that he was just thanking us for acquiring the tract, thereby protecting his home. —LMO Barry. S. Zaffuto, Ebensburg.

## Don't Hibernate

**BLAIR COUNTY**—With the hunting seasons essentially over, now's a good time to return something for wildlife. Winter is a great time to build brush piles for cottontails, erect nest boxes for bluebirds and wood ducks, and prune apple trees for deer and other animals. There are plenty of worthwhile outdoor projects that can be done. Look around, see what you can do. —WCO Don Martin, Hollidaysburg.

## Frightening

**LYCOMING COUNTY**—After watching the TV special "The Poisoning of America," I got to thinking how mankind is turning our planet into a large garbage dump. We have polluted our ground, air and water; our forests are fading from acid rain and the greenhouse effect; and the protective ozone layer has a huge hole in it. What are we leaving for future generations? I think it's time we start putting some real pressure on those in positions to make the much needed changes. We don't have forever. —WCO Dan Marks, Williamsport.





**WILLIAM KING**, Allentown, dropped this 270-pound bruin in Pike County during the 1987 season. Bear hunters fared even better last year, when a record 1614 Pennsylvania black bears were harvested.

## Record Bear Harvest

**H**UNTERS harvested a record 1614 bears during the three-day 1988 season. The previous record, 1556, was compiled during the 1987 season.

Prior to the season, wildlife managers indicated a harvest of at least 1500 bears was necessary to prevent an increase in the population, and a harvest of 2000 or more would be desirable. The harvest registered will help minimize the

problems with nuisance bears, but probably won't reduce the population.

"We're satisfied with the 1988 harvest," said Dale Sheffer, Bureau of Wildlife Management director. "With the high population we now have, from a wildlife management standpoint, it would have been better if hunters had taken even more. A harvest of 2000 or even 2500 certainly wouldn't have jeopardized the resource. We're sure there will be as many bears around next year as there were in 1988."

Sheffer points out bear damage complaints and reports of nuisance bears continue at an elevated level, and Pennsylvania probably had as many bears in 1988 as it ever had. Only 89,000 of the 100,000 bear licenses allocated were sold, which probably held down the final harvest figure.

The largest harvest—164—occurred in Lycoming County. Other top counties were McKean, 134; Clinton, 120; Centre, 102; and Clearfield, 100.



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## **GAME NEWS**

**For a Friend . . .**

Harvest figures for other counties were: Potter, 81; Monroe, 77; Elk, 74; Pike, 69; Jefferson, 61; Tioga, 58; Forest, 50; Cameron, 47; Warren, 42; Carbon, 41; Luzerne, 35; Wayne, 35; Sullivan, 33; Huntingdon, 33; Union, 30; Bradford, 27; Lackawanna, 24; Indiana, 23; Mifflin, 22; Cambria, 22; Westmoreland, 19; Venango, 17; Somerset, 16; Wyoming, 13; Clarion, 12; Columbia, 8; Snyder, 8; Blair, 6; Armstrong, 4; Schuyl-

kill, 3; Bedford, 1; Dauphin, 1; Lebanon, 1; and Mercer, 1.

Of the bears taken, 43 weighed in excess of 400 pounds (live weight). Two went over 600 pounds, 10 others weighed in excess of 500 pounds, while the remainder went over 400 pounds.

An analysis of the harvest showed 1021 (63.3 percent) were taken the first day; 424 (26.3 percent) were harvested the second day; and 169 (10.5 percent) were tagged the third day. Almost half of the harvest, 780 bears, were males, while the remaining 833 were females, a male/female ratio of .94:1. The bears taken in Dauphin, Lebanon and Mercer counties are the first ever for those three areas.



**MR. THOMAS BLANDFORD, right, Pittsburgh, recently donated to the Game Commission a 212-acre tract in western Greene County. As a tribute to his generosity, Mr. Blandford was presented a 1988 Working Together for Wildlife Conservation Edition fine art print, by Land Management Officer Dick Belding. The property, which will become a new State Game Lands, has excellent populations of white-tailed deer, wild turkeys, ruffed grouse, and both gray and fox squirrels. In addition, running through the parcel is a portion of the Warrior Trail, an old Indian path between the Monongahela and Ohio Rivers. The land was given to the agency so it will forever remain open for all outdoorsmen to enjoy.**



# 1987 Game-Take Survey

By William K. Shope

Wildlife Biologist

SINCE 1971 the Game Commission has been running a mail survey of hunters following the close of the small game season. Data from this survey are used to estimate annual hunter participation and small game harvests. The 1987 estimates derived from these data are compared to the 1986 estimates in Table 1. In addition, hunter participation and average season harvests for species surveyed in both the first survey in 1971 and the 1987 survey are compared in Table 2, to illustrate some of the changes that have taken place in the past 17 years.

Fewer hunters pursued small game in 1987 than in 1986. Despite declines in hunting pressure, however, harvests of fall turkeys, woodcock, ducks and snowshoe hare were up from 1986 levels. For pheasants, doves, geese, and spring gobblers, harvests dropped less than participation declines for the same periods. Rabbit and squirrel harvest decreases were similar to participant decreases, but the quail harvest decline was greater than the drop in quail hunters.

Furbearer harvests in 1987 were up from 1986 levels for all species except red fox and muskrats.

Since the first survey, in 1971, the numbers of pheasant, rabbit, and quail hunters have declined (Table 2). The average annual take for individual hunters for quail and pheasants was lower in 1987 than in 1971, but the average rabbit harvest was higher. The average take of doves, a migratory species associated with farmland, and the number of dove hunters was higher in 1987 than in 1971.

In contrast to those for farmland wildlife, hunter participation estimates for forest wildlife species were about the same in 1987 as they were in 1971. The average harvests for squirrels and grouse were higher in 1987 than in



**WILDLIFE BIOLOGISTS** have been surveying small game hunters every year since 1971. The information from the questionnaire returns are used to calculate hunter participation rates and small game harvests.

1971. Woodcock, a migratory species associated primarily with young forest habitat and reverting areas, had fewer hunters pursuing them and a lower average harvest in 1987.

Because data for spring and fall hunting were not separated in 1971, as they were in 1987, turkey hunter participation and harvest averages cannot be compared. However, data from the 1985 National Hunting and Fishing Survey shows that 32 percent of the hunters that year pursued turkeys. That figure is

**Table 1. Small Game Harvest and Hunter Participation Estimates  
For 1986 and 1987**

<b>Species</b>	<b>1986 Harvest</b>	<b>1987 Harvest</b>	<b>Percent Change</b>	<b>1986 Hunters</b>	<b>1987 Hunters</b>	<b>Percent Change</b>
Spring Turkey	16,155	14,674	- 9.2	246,039	206,039	- 16.3
Fall Turkey	26,763	28,346	+ 5.9	336,225	282,761	- 15.9
Total Turkey	42,918	43,023	+ 0.2	No Est.	No Est.	No Est.
Rabbits	2,092,910	1,764,744	- 15.7	612,424	516,281	- 15.7
Grouse	536,553	484,016	- 9.8	442,897	374,741	- 15.4
Squirrels	2,833,061	2,364,596	- 16.5	552,336	472,250	- 14.5
Pheasants	471,090	410,396	- 12.9	534,555	430,086	- 19.5
Woodcock	165,685	175,124	+ 5.7	110,886	96,936	- 12.6
Quail	37,277	17,849	- 52.1	30,107	20,901	- 30.6
Dove	1,531,368	1,374,110	- 0.1	166,139	137,402	- 17.3
Geese	69,748	68,541	- 1.7	65,087	50,804	- 21.9
Ducks	174,405	184,882	+ 6.0	69,590	53,578	- 23.0
Snowshoe Hare	13,189	14,412	+ 9.0	27,557	19,573	- 29.0
Raccoon	426,625	443,934	+ 4.0	33,302	31,266	- 6.1
Muskrats	440,880	346,558	- 21.0	No Est.	No Est.	No Est.
Red Fox	95,330	74,590	- 21.8	No Est.	No Est.	No Est.
Gray Fox	46,387	56,944	+ 22.8	No Est.	No Est.	No Est.
Opossum	210,953	217,552	+ 3.0	No Est.	No Est.	No Est.
Skunk	39,064	39,632	+ 1.5	No Est.	No Est.	No Est.
Mink	16,008	18,513	+ 15.6	No Est.	No Est.	No Est.

comparable to the 1971 Game-Take Survey estimate of 34 percent.

Although hunter participation has dropped for most farmland wildlife species, hunter participation for most other small game species has not changed significantly. With the exception of pheasants, quail, and woodcock,

the average harvests for other game surveyed was higher in 1987 than in 1971. Because of more restrictive bag limit regulations in 1987, quail and woodcock average harvests are not totally comparable. Overall, 1987 was as good or better than 1971 in terms of the average hunter success.

**Table 2. A Comparison of average harvests and participants for small game species surveyed in both 1971 and 1987**

<b>Species</b>	<b>Participants Percent of all Hunters</b>		<b>Average Harvests</b>	
	<b>1971</b>	<b>1987</b>	<b>1971</b>	<b>1987</b>
Rabbits	67.4	44.9	2.68	3.45
Pheasants	62.1	37.4	1.41	0.96
Quail	2.9	1.8	1.15	0.86
Dove	9.5	10.4	7.16	11.50
Grouse	34.6	32.9	0.68	1.30
Woodcock	10.5	8.5	2.25	1.80
Squirrels	41.9	41.2	4.02	5.02



## Fun Games

# "The Honorable Mr. Woodchuck"

By Connie Mertz

Complete these sentences about the woodchuck.

1. Woodchucks, like chipmunks and ground squirrels, are \_\_\_\_\_ .
2. Woodchucks dig holes called \_\_\_\_\_ .
3. Because the woodchuck can make a shrill calling sound, it is also called a \_\_\_\_\_ .
4. The ears, nose and eyes are referred to as \_\_\_\_\_  \_\_\_\_\_  organs.
5. To escape winter's cold, woodchucks \_\_\_\_\_  \_\_\_\_\_ .
6. One of the woodchuck's natural enemies are \_\_\_\_\_ .
7. Woodchucks are abundant game animals; therefore, they can be \_\_\_\_\_ .
8. Woodchucks \_\_\_\_\_  never stop growing.

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Copy all the circled letters in the spaces below, and unscramble the key word. \_\_\_\_\_

Clue: This Pennsylvania town honors the woodchuck every February 2.

Answer: \_\_\_\_\_

Answers on page 64



**FOR MOST** sportsmen the Hunting Car is the same one that's driven to work, to the shopping malls, and to pick up the kids. When it comes to hunting, though, what it may lack in traction or gear ratio is made up for in driver determination.

## Traveling Adventures

**T**HERE ARE a lot of misconceptions about the Hunting Car. Imagine a couple of All American, red-blooded, wool-shirted outdoorsmen returning to their vehicle after a day afield. What do you see them driving? A 4 WD of course, ruggedly built and impressively tired, something like a Blazer, Bronco, Jeep, or pickup. But let's return to real life. Just as the typical hunter is as likely to be tall and thin, short and portly, clean shaven and balding, as bearded and brawny, so the Hunting Car is something else as well.

The truth is, for most sportsmen, the car that's taken hunting is the same one that's driven to work, to the shopping mall, to pick up the kids after school. It's probably an imported compact or one of Detroit's current scaled down sedans or station wagons. The family car is its owner's pride, a major investment that he spends summer Saturdays washing and waxing.

But if that owner is a hunter, he must

obey a hunter's imperative. That is get to the hunting grounds, no matter where they are, no matter what it takes. The pampered 'round town car becomes the Hunting Car by necessity, if not by manufacturer's intent or design. What the vehicle lacks in traction and gear ratio, it will make up for in driver determination. Of course, not every hunter's auto needs become a Hunting Car. In many circles, the Hunting Car is the one that belongs to the buddy who can most easily be prevailed on to drive. Let the nicks and scratches fall where they can be persuaded.

As a Hunting Car, the vehicle will acquire a new, but predictable personality. Where chrome once shone, mud is splattered from end to end. Twigs and leaves festoon the grill and bumpers, beagle nose prints bedeck the windows. The interior carpet is a catalog of local soil, flora and possibly fauna. The back seat is lost in a pile of hunting coats, orange hats, unmatched gloves, as-



sorted caliber guns and cases. Under the front seat is a pair of wet socks, half a sandwich and some errant shot shells. The inside of every Hunting Car has the same ambience. It smells like a combination of wet wool, dog, and peanut butter.

Although some parts of Pennsylvania are more suited to Hunting Cars than others, appropriate terrain can be found nearly everywhere. All that's needed is a route that isn't paved and center-stripped. Steepness, wetness, rockiness are no deterrent when getting to or finding a hunting spot is concerned. The Hunting Car doesn't stop where the macadam ends, where those faint of heart and carburetor would falter. It'll tackle anything wider than a deer trail, and not necessarily as well defined.

I always seem to be in a Hunting Car with a driver who, noticing an opening in the trees on the side of the dirt road, says, "Let's see where that goes." To me, the pathway looks like a double set of deer tracks or the trace a Conestoga wagon left some time in the past century. I know what will happen next.

We turn into the lane and drive intrepidly onward. The roadway narrows imperceptibly at first, but soon the trees that sedately lined the edge fling themselves across the path. Branches slap the sides in an affront to our progress. There's an occasional "Screeeeeeee" as a particularly malicious stub rakes the paint job. The gravel becomes boulders, the direction anywhere the driver can fit the car between the trees. To make things complete, this is a one-way street, nowhere to turn around.

Hunting Car drivers have an abiding faith that every road has an "other end," that it "comes out somewhere." It's considered bad form to turn around and go back, even if you can, and cowardice to use reverse. The road's "other end" is always assumed to be just beyond the next impossibly rough stretch, as it was expected to be just beyond the last. When a road doesn't go through, a Hunting Car driver can save face if the path ends at an abandoned field, fire-tower, or other open spot where he can

# Another View...

by Linda Steiner

circle and return the way he came. He'll be able to say that he found out where the road went, if anyone would ever care enough to ask.

"No Maintenance, Travel At Your Own Risk" is an irresistible invitation to Hunting Cars and their drivers. There must be something worth seeing back that road, some truly great place to hunt, or they wouldn't have put up the sign. Prime routes for the Hunting Car are not just those marked as "secondary" or "unimproved" on the map, but the ones that are dotted or dashed and say "trail." If a Hunting Car can't find a way overland, to get through the blank space on the map that shows a gap in the navigable sections of a road, it's not worth the title.

## Survivors

Hunting Cars are anything but specialty vehicles. They survive, if not shine, in a number of outdoor travel situations. The Hunting Car is an instant Mountain Car whenever the terrain becomes unexpectedly abrupt. Somehow, careening uphill, tires spinning in loose rock, is never as nerve wrenching as easing over the top and looking down at the roller coaster side of the mountain, wondering when the brakes were inspected last.

My favorite variation of the Hunting Car is the Swamp Car. More times than I care to remember I've gone from roads having an occasional puddle in the middle, to puddles having an occasional road in the middle. Sometimes a swamp will swarm across the entire roadway in a wide sheet, the other end of the road

emerging tantalizingly at the far end of the watery expanse. It's as if the swamp were an Eastwood fan, saying "Do you feel lucky today, punk? How deep do you think I am?"

Slick mud and soft sand have their own challenges. If the Hunting Car gets stuck in them, there's no digging out because there's no solid bottom underneath. On that sort of road, you must keep the car moving, keep up the momentum, and pray the "other end" isn't a myth this time.

Snow transforms main highways into Hunting Car territory, and ice adds real thrills. I recall reaching the end of a dead end road, on frozen pavement that

had become glare ice in a sudden rain-storm. There was no tire traction to turn around. One of the group got out and spun the car simply by pushing on the back bumper, with one hand. That was interesting.

As a veteran of many makes and models of Hunting Cars, I believe in their guts and grit, but I'm not fool-hardy. I pack tire chains, for mud and snow, a tow chain in case someone comes along who can pull me out, and a blanket if they don't. I always carry a quarter for a phone call when I finally give up and hike out. But most important of all is the major credit card . . . for when the tow truck arrives.

## Crafts Replaces Hickes

**E**DSON S. CRAFTS, III, was recently appointed to the Pennsylvania Game Commission, replacing Paul E. Hickes, Jr. Crafts, from Huntingdon, was graduated in 1969 from St. Lawrence University in Canton, New York, and received a Juris Doctor Degree from the University of Toledo, College of Law in 1972.

He's been the sole proprietor of a law practice since 1974, and has served as the Assistant District Attorney of Huntingdon County since 1976. In government service, Crafts is the Municipal Solicitor for Oneida and Miller Townships, Huntingdon County, and Solicitor to Mt. Union Borough Civil Service Commission.

An avid sportsman, Crafts belongs to the Huntingdon County Historical Society, is a founding member of the Rays-town Chapter of Ducks Unlimited, and also belongs to the Thunderbird Chapter of the Ruffed Grouse Society.

"Having participated in various Game Commission projects and by representing the Game Commission during my tenure as Assistant District Attorney, I stand strongly committed to wildlife and environmental conservation," said Crafts upon his appointment to the agency's eight-member governing board.

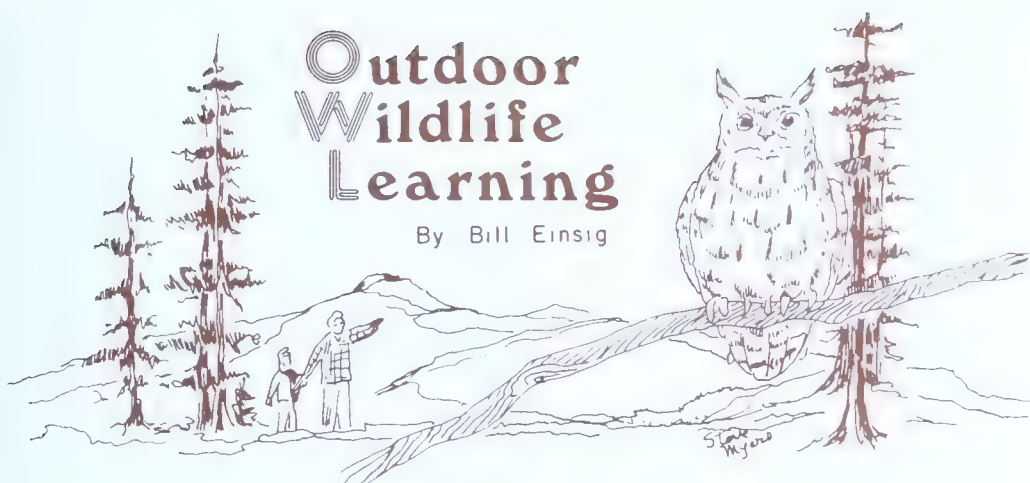
Hickes, a general contractor in Hunt-



**Edson S. Crafts**

ingdon, served as a commissioner since 1980, and during his tenure he was Commission Vice-President in 1981 and President in 1982 and 1983. Among his many accomplishments, as chairman of the agency's Building Committee from 1982 through 1987, he was instrumental in guiding the Harrisburg headquarters construction project through to completion.





## THE BAT TEST

**B**ATS SHARE living quarters with most of us yet they remain somewhat mysterious. Their night flights, secretive habits and unusual appearance combine to make them unfamiliar, though common, neighbors. How well do you know your bat facts?

- How many species of bats are found in Pennsylvania?
  - 11
  - 8
  - 6
  - 2
- This is our largest bat, with a wingspread of almost 16½ inches.
  - Big brown bat
  - Red bat
  - Hoary bat
  - Indiana bat
- Our most common bat is the
  - Eastern pipistrelle
  - Little brown bat
  - Keen's bat
  - Big brown bat
- How many litters, and young per litter, are typical of most bats?
  - 1 litter, 1 young
  - 1 litter, 2 young
  - 2 litters, 1 young
  - 2 litters, 2 young
- Bats usually mate during which season?
  - Spring
  - Summer
  - Fall
  - Winter
- During winter, most Pennsylvania bats
  - Remain active
  - Hibernate
  - Migrate
- Which of the following are frequently transmitted to humans by bats?
  - Rabies
  - Tuberculosis
  - Parasites
  - None of these
- Pennsylvania bats eat
  - Flowers
  - Fruits
  - Insects
  - Other bats
- Favorite roosting sites of Pennsylvania bats include
  - Caves
  - Buildings
  - Trees
  - All of the above
- Favorite hibernation sites of Pennsylvania bats include
  - Caves
  - Buildings
  - Trees
  - All of the above

### Answers:

1. A Eleven species have been reported in the state but two are extremely rare.
2. C The hoary bat roosts in trees and is one of the few Pennsylvania bats to migrate.

## **GAMEcooking Tips**

### **Janet Vance's Miracle Buttermilk Pie**

- 1½ cups sugar
- ½ cup Bisquick
- 1 cup buttermilk
- ½ cup melted butter
- 3 eggs, beaten
- 1 tablespoon vanilla

Combine the dry ingredients in a bowl. Beat together buttermilk, butter, eggs and vanilla. Pour this mixture into the dry ingredients, stirring well to combine. Bake in an ungreased nine inch pie pan at 350 degrees for about 30 minutes or until tester comes out clean.

—FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY

3. B The little brown bat is found statewide and is a prodigious insect eater.
4. A Most bats have just one young per year, but some bats do have two young and a few species have more than two.
5. C Mating takes place in fall, but the female stores the sperm in her Fallopian tubes through the winter months until she produces eggs the following spring.
6. B Only three Pennsylvania species migrate—the rest hibernate underground.
7. D No evidence indicates bats are more likely to transmit any disease more than any other animal.
8. C Our bats are insect eaters even though the larger bats may occasionally eat a smaller bat. Fruit eating bats are common in the tropics.
9. D Some species roost in all of these places.
10. A Hibernating bats seek the underground shelter of caves, mines and tunnels where temperatures stabilize above freezing.

## **Bats in Trouble**

It's difficult to arouse much public support for bats, yet two of Pennsylvania's bats are in trouble.

The Indiana bat and the small-footed bat have experienced population declines and need further study. In fact, biologists feel many populations of many bat species are declining across the state, and that much research needs to be done to better understand the habits and problems of these small flying mammals.

Bats are vulnerable to population stresses because they bear few young and, therefore, rebound slowly from losses. Most also hibernate, or roost, in large numbers, making it possible for one catastrophe to destroy many adults.

Their greatest threat, however, is the continued ignorance and unreasoned fear of humans toward bats. Widespread—and commonly accepted—misconceptions are almost impossible to dispel. Most of us would rather kill a bat than try to save one.

The same prejudice used to be true of animals such as kestrels, bobcats and cougars, so maybe the bat's day is yet to come.

## **The Bat Trend Survey**

You can help study the population trends of Pennsylvania bats by cooperating in the Volunteers for Wildlife Bat Survey. Each year, between June 14 and June 28, volunteers across the state are asked to count bat sightings in areas close to their homes. Data are then compiled by the Game Commission and, over a period of years, population trends for Pennsylvania bats can be established.

Your job as a volunteer is easy—you don't have to be a bat expert. Some weeks before the actual survey, you'll locate a local study area where bats are likely to come to drink and feed. It might be a farm pond, a stream or an old quarry hole. After you establish an imaginary reference line across the study area, you'll count the number of bat passes for four 15-minute intervals. You'll also be asked to estimate the number of different bats you think were using your area at the time of your study. On another night, you'll repeat the process. That's it!

Detailed instructions are available to help you collect and report useful data. Contact Volunteers for Wildlife, Mid-Atlantic Audubon Society, 1104 Fernwood Ave., Camp Hill, PA 17011.



**H**OOFY'S and game wardens, the bad guys and the good guys, Johnnie Sneaker and Johnnie Law, tracking each other through the woods. I suppose that's how some people imagine wildlife law enforcement. Every district has its arch villains, the outlaw types, the ones I call my preferred customers. Going one on one with these violators can make some interesting moments afield.

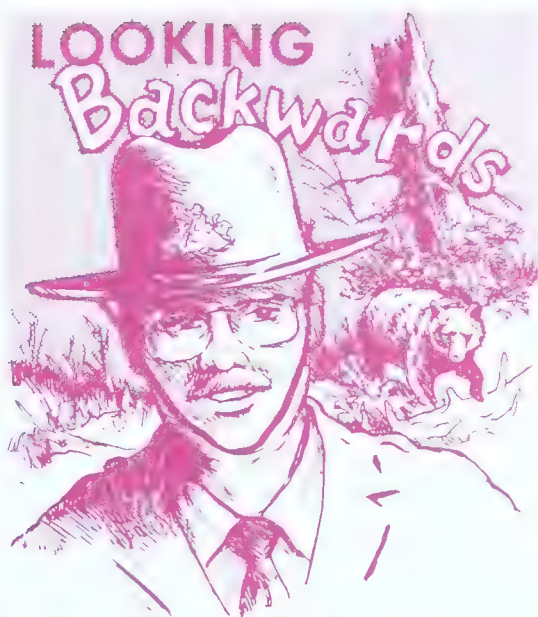
Beaver season in Tioga County in the 1970s was the time and place for what I'll call selective law enforcement. There was a fair amount of beavers in my district then. For the most part, though, they were living in areas where they weren't causing any problems, and I wanted to make sure they weren't wiped out by unscrupulous characters. There was a lot of trappers then, from all over the state, but I was particularly interested in a few of the local guys who liked to play "Guess who caught the beaver?" on tagging day.

The limit back then was three per season in my district. Given a couple of conibeat traps and some luck, any fairly proficient trapper could catch the limit. But I had a few really talented trappers who would take all they could carry. Then on tagging day they would come with Mom, little Johnnie and Ole Uncle John, each claiming his season limit of three. Some even had trap tags made for the bogus trappers, and they would magically appear on their traps as soon as they caught their third beaver.

We paid particular attention to a couple of individuals who were notorious for taking over their limit.

Our work actually began a month or so prior to the season. I made it a point to try and learn where every beaver in my district was located. If I knew where the beaver were, I could quickly find my trappers when the season opened. Dave Brown, who now is the Land Management Officer in Tioga and Potter Counties, was my coach on this operation. Dave was the Game Protector in that district before I was assigned to it, and before joining the Game Commission he was an expert beaver trapper in his own right. I had just moved into the county the year before and had never trapped beaver, so Dave was a big help in showing me around and teaching me the ropes. So were my deputies, especially Ed Signor, from Arnot, who knew where nearly all the beaver were in that area.

On the opening day of beaver season



**By Jack Weaver**

**Wildlife Conservation Officer  
Centre County**

each of my deputies was assigned some beaver locations to check. Among us we searched for the suspects' traps in all the areas where beaver lived. Our suspects didn't make illegal sets, per se, they just didn't stop after catching their limits. That night the deputies who scored called in to report the locations of our suspects' traps. We had managed to locate all of their sets. Now it was up to the beavers.

Beavers usually begin to move and feed after dusk. When the dams are covered with ice they cut sticks from the submerged feed beds near the lodge. Occasionally they will venture out along established runways under the ice, which usually lead to nearby spring seeps which are often free of ice. This beaver activity will last for an hour or so, depending on the temperature. Anyway, a good set should have a beaver in it before midnight.

Our plan was simple. Every night, starting at midnight, we would check each trap and keep track of how many beaver were caught. Each beaver we checked would be marked and the information recorded. The holes we needed to chop in the ice to check the sets would be frozen solid again by morning, before the trappers made their rounds, so we hoped they would never guess we were watching.

I stepped out of my Scout into the cold dark of a February night. At 20° below



zero the moisture in the air had frozen and was sifting about like snow. The tiny ice crystals seared my lungs and played funny games with the hairs in my nose. Knee deep, the snow crunched loudly under our feet as Deputy Larry Morgan and I followed the trapper's trail into the hemlocks that bordered the swamp. No matter how hard we tried to avoid them, twigs slapped across our faces, feeling like a red hot brand. By the time we reached the first set I was beginning to wonder if we were so smart after all.

The trap was a conibear placed in a beaver run leading to a spring seep. The seep was frozen, so I chopped a small hole over the trap and lay down on the ice to peer into the merky water. I had to lay my face right down on the water to see past the flashlight glare on the water surface—hardly pleasant considering the temperature. Eventually the light's rays pierced the merky water, and a large hairy body lay suspended just inches below my nose. I told Larry about a beaver. We cut a larger hole over the trap. Then I removed my gloves, and rolled up my sleeves, and plunged my arms into the icy water so I could slit an ear on the beaver carcass. Larry calmly recorded which ear I slit while I was jumping around, trying to get my sleeves down and gloves on before my hands and arms froze. Shivering violently, I warmed up trudging from set to set around the pond.

We had originally planned to follow at least three suspects each night, but I soon realized I would have my hands full just staying with two. Also, we had to check the sets each day. Because trappers are opportunists they frequently change sets from pond to pond as they find better locations. We had to find these moves during the day, while the trappers were at their jobs. Then, while they slept,

we would be out again. It was grueling work, and I soon wondered how long we could keep up the pace. Different deputies helped me during these nightly excursions.

I eventually lost track of the second suspect's movements, but not before we found a muskrat in one of his traps. The law was forgiving for an accidental catch like this, provided the trapper turned it in immediately. Muskrats were not in season during beaver season. We gave him five days, but he never reported the 'rat, even though Deputy Signor was his neighbor. After eight days we confronted him and confiscated the muskrat, skinned and stretched. A couple of weeks later he was found guilty of possession of a muskrat in close season. The fine wasn't much, but the license revocation cost him a year of trapping.

While all of this was going on we continued our nightly monitoring of the first trapper. Sure enough, he caught his limit of beaver and kept right on trapping. When the fourth beaver was caught we staked out the set. It was a Saturday and we knew he was off work. A deputy helped me with the stakeout from daybreak until about noon. The trapper didn't show. Dave Brown relieved me at noon. By then I was exhausted and about frozen. Our suspect finally came about 2 p.m., and Dave watched him remove the beaver and then reset the trap. He obviously intended to keep right on trapping. Dave and the deputy that was with him approached the trapper and seized the beaver as evidence. The case was concluded months later when the Tioga County Common Pleas Court found the defendant guilty of trapping one beaver over the season limit and attempting to take a second.

We continued our night patrols during beaver season through the coming years. I knew they were effective because several reputed outlaws stopped trapping beaver in my district after that. And one, a notorious out-of-season mink trapper, was so impressed with our dedication to protecting the resource, that he became a staunch ally. Over the years he provided information that resulted in the prosecution of several trappers for over the limit violations, including the individual we had previously caught with the illegal muskrat. All in all, we kept the outlaws off balance by using a good method of enforcement, one which concentrated on the deliberate violators, the ones we really want.



# Thornapples



Chuck Fergus

**T**H. WHITE, a British writer who was an avid hunter, observed in his book *England Have My Bones*, “I can’t believe one would enjoy one’s kills very much without a nice percentage of misses.”

Over the course of two decades of wingshooting, I have accumulated my nice percentage of misses, including clean misses, spectacular misses, workaday misses, embarrassing misses, understandable misses, mystifying misses, amusing misses, and misses that have stuck in my craw for years. Some really fine, skillful, and quite enjoyable kills; but always that nice percentage of times when the shot flew where the bird didn’t.

I am adept at missing doves. They are tough targets, speedy, shifty fliers that can skid and sideslip in an instant. I remember one humid afternoon spent sitting on a hill over which the doves had to skim to reach a favored feeding ground. I had just killed five doves with five shots—a minor miracle; yet I was sure I would kill a sixth bird for six in a row, something I’d never done in my life. And who knows?—I might just go on and collect my entire limit, twelve birds, with a mere twelve shells—I had read about people accomplishing this feat, although I’d never witnessed it.

Anyway, things felt right. The birds showed clearly against the milky sky, they flew close past my hiding place, the gun seemed to find the sweet spot

against my shoulder, and every time I pressed the trigger a dove fell.

With my five doves at my feet, I looked out over the corn and spotted dove number six coming from a long way off. Its wings beat steadily as it swept through the air, a big-bodied bird with a long, pointed tail. When it drew within range, I did as I had done the five times previous: I popped up already swinging the shotgun, and when the buttstock found my shoulder and the barrels blotted out the bird, I pressed the trigger. I missed. The dove poured on the speed, and I swept the scattergun after him, overtook him, punched the trigger again—and missed again. Why? It had all seemed the same. Although perhaps I had lifted my cheek off the stock just a little, anticipating the bird’s fall. Or maybe I had momentarily, imperceptibly, stopped my swing. It appeared, in any event, that I had changed some critical part of the shooting process, because try as I might, I could not now down another dove. And so it continued for the rest of the day.

If there is a bird on which I have enjoyed a low percentage of misses, it is the woodcock. The woodcock allows the hunter to approach quite closely, and it takes off at a fairly slow speed, although with a certain baffling twist or shimmy to its flight. I have had days when it was one, two, three, four shots,



and four long-billed woodcock in the game pouch. Then there has been the other kind of day, when I simply couldn't connect. The woodcock got up too close to my boots. Or the cover was too thick—the birds disappeared behind trunks or branches within milliseconds. Or—and this is most frustrating of all—I could come up with no reasonable explanation, I just plain missed and missed.

I remember one particular woodcock from two seasons ago; I was hunting by myself, working a little cover along the creek, and I was expecting woodcock, for the ground was heavily marked with their chalk. I entered an open copse of aspen, took a few steps, and a woodcock twittered up. I let him get out a proper distance and shot. He kept on flying. I let loose the second barrel to no effect. I frowned and shook my head, marked the bird down in another aspen patch. (Even after being shot at, a woodcock will often fly but a little ways and then alight, offering the hunter a second chance.) I went to the aspen patch, put the bird up, shot again (both barrels again), and missed again. It was as if my shotgun were throwing doughnut-shape patterns. I put the woodcock up a third time, failed to hit him, and he twisted

down across the creek and lit in a dog-wood thicket. The creek was shallow, and I could have crossed, but decided to let him alone.

As if there weren't already enough opportunities to creatively miss, last fall I took up duck hunting. I missed black ducks, mallards, pintails, a widgeon (at least I think he was a widgeon), and wood ducks galore. (I thoroughly enjoyed my time on the marsh, of course, and I bagged enough ducks to want to go after them again next year; besides, there are those new camouflage hip-boots and pricey L. L. Bean cork decoys to amortize.)

It's much easier to miss ducks than it is to hit them. The principal means of missing ducks is to shoot behind, although it is also possible to shoot above or below, if not ahead of them. Mostly I was behind, quite a ways behind, as illustrated by the pair of woodies that flashed past me one morning, my shots causing waterspouts on the creek a good five yards astern. (One of the ducks I did bag, a black, had the misfortune to fly into a string of shot meant for the duck preceding it.) Then there was the single woodie that came floating down to my decoys with wings cupped—picture-perfect, a real set-up—and somehow I





missed him with the right and the left, the inflexibility of my frozen fingers probably having much to do with my spectacular lack of success.

I have a friend who is a very fine wing-shot, and he tells me that during several seasons he never missed a bird: 15 pheasants got up in front of his gun, and all 15 pheasants fell. I have never been so successful, so mechanically deadly. (Nor, I think, would I wish to be.) Last season I shot at five wild pheasants and killed three of them. One that I missed I particularly remember. We were working a fallow field patched with foxtails; it was a windy, dry afternoon in late November, and I could tell that my springer spaniel, Jenny, was onto a bird but having trouble unraveling the scent. Ahead of her lay a little tussock of fox-tails, and there I imagined the bird would be. When she roused him out, I got my feet into position and laid the front bead on his tail, a straightaway shot, touched off the improved barrel (no effect), touched off the modified barrel (no effect), and the rooster happily flew across three fencerows, not to be seen again.

Here I know exactly how I missed. I had assumed a straightaway shot, and one almost never gets a straightaway shot at game. The bird appeared to be flying directly away from me, yet, in retrospect, I'm sure it was bearing slightly to the left; and so my shots, fired directly at its tail, passed harmlessly to the right.

If I have missed regularly, missed spectacularly on gamebirds, I have never missed more regularly or spectacularly than on grouse. Grouse take off quickly and thundrously, they fly fast, and they live in thick places not conducive to the free passage of shot.

Here let me turn to my gunning notebook.

"Date: 28 December 87. Weather: 30 degrees, light snow all afternoon, 5" ac-

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cumulation. Where hunted: Christmas Tree Cover. Game hunted and bagged: Grouse (0).

"Today the dog work was excellent, the shooting execrable. I had four nice chances at the Christmas Tree Cover, and botched them all.

"One bird towered up from a tangle of grapes. I shot too quickly with the first round, then hesitated and had to try to catch up with the second round. Another bird held tight until Jenny flushed it, then came beating up through the berry canes, flew straight at me (passing a scant 15 feet to the right of my head), and I'm still not sure how I managed to miss. A third bird streaked right-to-left through some open woods, and I sawed off a sapling in its wake. The last bird of the day had squatted at the base of a small oak in an incipient snow roost; a hen, she powered up so close that I could see the ashy gray border around the broken black band of her chestnut tailfeathers. I shot twice, and all that came down were snowflakes."

And so it goes. I imagine that for me, as for most upland gunners, the misses will always outnumber the kills; and that's as it should be. "If you don't shoot, you'll never miss, but you'll never hit one, either." Thus did a hunting companion console me one day after I'd missed a wide-open shot at a grouse. And a little farther into the cover it was wings pounding and me spinning and the shotgun's sudden, peremptory bark, a puff of feathers drifting as a grouse went bumping down through the branches of a crabapple tree.

Coming of age . . .

# BOWFEST III

By Keith C. Schuyler

**W**HEN OVER 500 participants and 1000 spectators turn out—in 90-degree temperatures—for a repeat performance of a growing archery event, it must be something special. That was the attendance at Bowfest III, Northhampton County's contribution to Pennsylvania archery, held last year on the hot weekend of August 5 to 7.

## Most Utilized Facility

For the third consecutive year, Bowfest activities were centered at the Bear Swamp Archery Complex, cited by The National Archery Council as the most utilized archery facility in the United States. That designation resulted from a demographic survey to determine hubs of archery activity.

Officially, the event is known as Bow-

hunters Festival of Northhampton County, for it is a joint venture of the county Federation of Sportsmens Club and the Northhampton County Park System. It is a happy marriage as Lew Hegedus, president of the Federation, and Dr. William Mineo, superintendent of the county's park system, are both archery advocates and among some 100 volunteers who make the event possible.

Typically remote as an archery facility, the Bear Swamp site is in the northeast corner of the county, just west of Lake Minsi. There's easy access south from I-80 or north from Route 22 via Route 191. It is but eight miles from Stroudsburg, 14 miles from Easton. Proximity to other states encouraged attendance from New Jersey, Rhode Island, New York, Maryland and Connecticut, as well as a large segment from eastern Pennsylvania. Guests had a choice of registering by the day or for the entire weekend.

The park system itself encompasses some 1500 acres, comprising 16 separate parks, of which all but two are open to hunting. Some of the festival profits go into a fund for the purchase of additional public hunting land. Bear Swamp alone has 500 acres which were purchased 13 years ago. Archery was first introduced nine years ago, when a modern target was installed. David Staples, Easton, now president of Outside Images and a veteran archery coach, was instrumental in designing the range. Professional Archery Association has certified about 800 pro archers at the facility.

Co-chairmen for the third annual Bowfest were Jerry Seyfried and Clay

**RENOWNED ARCHER** Stace Groscup, shown here shooting three arrows in a thrown target, also entertained the audience with his tomahawk and blowgun skills.







**JOSH BARTHOLOMEW, Paul "Sonny" Sterner, and Bowfest III Co-chairman Clay Ott pose with the many team trophies awarded during the festivities.**

Ott who have jointly spearheaded much of the activity for the event since its inception.

The festival began on Friday evening when free outdoor movies were shown in the spacious tent reserved for this and the various seminars the following two days. At least a dozen vendors of archery equipment registered for the event and did a booming business. Industry representatives were available to assist individuals in tuning their bows and to answer technical questions about archery equipment.

Although visitors had a selection of novelty shooting events, a substantial number of archers competed in the only formal archery activity, a team shoot animal round held on the three-dimensional target field course. The course, also open to those not entered in competition, consisted of 50, life-size animal

targets that ranged from bear to rabbit size.

Saturday's winner was Kline's Archery, with a team composed of Warren Miller, Bob Long and Bill Drew, all from Allentown, and Jeff Doklan, Bethlehem. They scored 1888 out of a possible 2000 points. Co-chairman Gearld Seyfried took time out to help a Bethlehem team tie for second place with 1770, which ended up taking the award when the other team was not available for a shootoff. Other archers from Bethlehem were John Judd, Sr., his son, John, Jr., and Greg Scheirer, Egypt. In third place was the team composed of Mike Hartman and Todd Hartman, Northampton, and Dave Ireland and Cindy Ireland, Lansdowne.

Sunday's team winner, with a score of 1868, was composed of Bruce Kent and Donald Barndt, Boyertown; Bill Fisher, Pottstown; and Dave Moyer, Boyers Junction. Izaak Walton Club's team was a close second with 1864. It included Randy Bernhard, Chuck Bernhard, Bill Drew and Ron Krivenko, all of Allentown. In third place was Sandy's Archery with a score of 1850. On the team







**OVER 50** three-dimensional life-size targets, above, were available for just plinking and for formal shoots. Shooting a Ping-Pong ball suspended in air, right, challenged the skills of even the most expert archers. The ever popular motorized running deer target, below, drew a fair number of hits—and misses—during the event.





were Bob Menslinger and Kelley Kingsley, Allentown; Rudy Marmelo, Bethlehem Township; and Joe Mucka, Bath.

In addition to team trophies, there also was an award for the highest individual score. Warren Miller, who spear-headed Kline's Archery team win on Saturday, and Randy Bernhard, Allentown's second place team top shooter on Sunday, had identical scores of 496 out of a possible 500. Dave Staples and I were named instant judges to determine the trophy winner.

It was decided that a sudden death shootoff would be held at 20 yards on the target range. A ¾-inch white sticker was attached to the black center of a target, and each contestant was permitted three practice shots on another target at the same distance. Bernhard won a coin toss and elected to shoot first at the trophy target.

His arrow was almost completely inside the center ring. A tie shot would have required additional shooting, but Miller's arrow was a shaft's width closer to the white spot. He was awarded the trophy for top bow of the 1988 Bowfest.

When not shooting the field course or taking advantage of the target range, attendees had a variety of activities to occupy their interests and participation.



A large tent, that could be effectively darkened for daytime video presentations, was the setting for a number of scheduled seminars.

Tom Fegely, outdoor editor of the Allentown Morning Call and radio and television personality, conducted two programs, one on the white-tailed deer and another on outdoor photography. Nelson Poyer, who has hunted all bears of North America, presented moving pictures of his exploits.

Jack Brobst presented an informative seminar on the techniques he's used to take 21 turkeys in Pennsylvania with the bow and arrow. Author of *Bowhunting For Turkeys*, Brobst continues his archery hunting pursuits, despite physical difficulties that have required substantial adjustment in his method of shooting. Deano Farkas, who has successfully hunted most American big game and many species of small game, utilizing the recurve bow, was present with a part of his extensive collection of broadheads and other archery memorabilia.

### Ever Popular

For participating archers there was the ever popular running deer target on the spacious Olympic field. From the 40-yard shooting line, the target usually became pincushioned on a single trip down and back the range. Those wishing to test their skill (and a little luck), could try to hit a floating ping pong ball uncertainly suspended in air by means of a reverse draft from a vacuum cleaner. Any arrows that pinned the ball to protective hay bales earned the shooter a chance on valuable archery equipment. Another ingenious arrangement provided shooting at clay birds from a distance of 15 feet as they traversed a wire to provide a tough moving target.

A highlight of Sunday's program was a shooting demonstration by Pennsylvania state champion Barry Wyneperle

**TOM FEGELY, Allentown, well known outdoor writer, broadcaster and photographer, presented seminars on white-tailed deer and outdoor photography. Other speakers presented seminars on a variety of archery and hunting subjects.**



**RANDY BERNHARD, left, and Warren Miller exchange congratulations after their sudden death shoot off for top bow of the 1988 Bowfest honors. After two days of competing, just an arrow width separated the two shooters.**

at the 90 meter distance. Wyneperle was a contestant for the Olympic team.

The biggest crowds were present for a demonstration by the articulate and fantastic West Virginia trick shot artist and student of the American Indian, the Reverend Stacy Groscup. He demonstrated proficiency not only with the blow gun and tomahawk, but also re-curve and compound bows. His instinctive shooting abilities had spectators shaking their heads in near disbelief. Although plagued by gusty wind, Groscup shot one, two and three arrows into aerial targets. As is his custom he capped his performance by shooting an aspirin tablet with an arrow after the pill was tossed into the air by an assistant.

Groscup sprinkled his demonstration with his personal experiences with the Indians, and sound advice on safety and

moral persuasion directed at youngsters in the crowd. Emphasizing that instinctive shooting is merely coordination of the eyes and the brain, a method he learned from Chief Standing Deer of the Cherokee Indian tribe, the 67-year-old retired minister insisted that anyone could shoot as he does. He had numerous archery artifacts on exhibit, including a bow made by Ishi, the last Yahi Indian.

With three successful annual bow-hunters festivals now a part of Northhampton County's archery history, plans are already under way for the 1989 Bowfest IV.

(Keith Schuyler was presented an attractive plaque at the Festival as a tribute to his contributions to archery)



# The Tale of the Twist

By Don Lewis

Photos by Helen Lewis

IT'S ALWAYS amazed me how a single fact can be blown into a full scale tempest of misleading rumors. I'm referring here to the storm of controversy that followed the discovery, in the late 1950s, that Remington's 244 varmint rifles, with a 1 in 12 twist, wouldn't stabilize bullet weights above 90 grains. (Note that at that time, the only bullet weights affected were the 100- and 105-grain bullets.) But, with so many half truths making the rounds, the 244 Remington was blown right out of the picture by the 243 Winchester.

No one seemed to notice that bullet weights below 100 grains in the Remington 244 performed on par with Winchester's 243 cartridge using the same bullet weights. In fact, I never found any great evidence of under stabilization with the heavier bullets in the 244. Apparently, I was a voice crying in the wilderness. But the proliferation of rumors and wild tales escalated to such a point that the 244 was discontinued and replaced with the 6mm Remington chambered in rifles carrying a twist of 1 turn in 9 inches. This increase in twist stabilized all standard weight 6mm bullets.

One point that was grossly overlooked was the simple fact that each manufacturer had a different application for the cartridge. Winchester saw



PGC Photo by Bob Haines

**THE RIFLING'S** rate of twist is easy to control and its main purpose is to give the correct spin necessary to stabilize a bullet during its flight to the target.

their 243 as a combination cartridge, hence the 1 in 10 twist that would handle the heavier bullet weights. Remington, on the other hand, saw the 244 as a varmint cartridge with lightweight bullets, so they opted for the slower 1 in 12 twist. Remington never promoted the 244 as a combination cartridge, but because the 244 and 243 are nearly identical in size, and made their debuts in 1955, the hunting public assumed the two were essentially equivalent.

## Sold Their Outfits

Many handloading varmint hunters, who should have known better, sold their 244 outfits and replaced them with Winchester 243s. It's strange that the bullet weights used by the varmint-hunting crowd gave better accuracy in the 1 in 12 twist of the Remington 244.



**WINCHESTER 243, left, and Remington 244 (now 6mm), are nearly identical in size, but when both were introduced in 1955, they were offered in rifles with different twists. Many shooters found that Winchester's 1 in 10 twist stabilized heavier bullets better than Remington's slower, 1 in 12 twist.**

In all the confusion, this fact was not explained, and the Winchester 243 continued its huge success at the sales counter.

It would seem logical, that to correct this problem, Remington would change to a faster twist in the 244 chambering. Apparently, however, the 244 cartridge had dropped to such low popularity that those in the know felt it would be better to come out with something new. In one respect Remington did just that with the introduction of their 6mm in 1963, but in name only. The 244 Remington and 6mm Remington cartridges are actually interchangeable.

### **Have Subsided**

The innuendos and stinging criticisms about the 244 Remington being inferior to the Winchester 243 have subsided as time and common logic have revealed the truth. While the 243 Winchester's 1 in 10 twist does stabilize heavy bullets better than the slower 1 in 12 twist of the Remington 244, it is not nor never was superior, if you come right down to splitting hairs. This is not being derogatory to the 243; it stems from a single ballistic fact.

The edge held by the Remington 6mm is slight to be sure. The 6mm case is a trifle larger and will hold more powder than the Winchester 243, and it has a longer neck, which handloaders consider an important feature. Other than the fact that the 244 Remington was not

designed for the heavier 6mm bullet, all the 6mm advantages over the 243 had been incorporated into the 244. That should be obvious because Remington did not alter the dimensions of the parent 244 case when designing the 6mm chamber dimensions.

It's reasonable to assume Remington could have simply changed the twist rate for the 244 cartridge, and the problem would have been taken care of. Apparently that was not the case. The same type of bad press that killed or severely damaged the 220 Swift in the 1930s, shot down—and that's not a pun—the 244. In the late 1950s and early '60s, the 244 name itself had an ominous and suspicious sound. Not any more; the Remington 6mm cartridge is on equal footing with its contemporaries—all because of a faster twist.

It's hard to believe that just one or two turns of twist in a rifle barrel could create such an uproar, but it did. The surprising part of it is that many shooters were really not sure what the argument was all about. Anyone can look through a rifle barrel and see the spiraling grooves that are cut or swaged into the bore. But few hunters and shooters can explain the exact reason why the number of turns in the barrel must be compatible with the weight, length and velocity of the bullet.

The rate of twist is easy to control, from a mechanical standpoint. It's basic purpose is to give the correct spin nec-



essary to stabilize a bullet during its flight to the target. If a bullet is not stabilized during its flight, it can't be accurate. If just spinning was all that was necessary to stabilize any weight bullet, there would need be only one rate of twist. We know that's not true, especially those of us who remember the history of Remington's 244. Maybe settling for a very fast twist would be the answer, but problems can develop with too fast a spin, too. That causes very short bullets to literally break up in flight or send them into wild gyrations that will destroy any semblance of accuracy, even at short yardage.

If you think a bullet won't come apart from over spin, here's an excerpt from a letter P. O. Ackley wrote on March 6, 1981. Mr. Ackley built me a 228 Ackley Magnum, based on a 30-06 case, and in his letter to me, he discussed velocity versus thin jacketed bullets.

Just for the sake of not causing any embarrassment, I will substitute another name for the famous bullet maker mentioned in Mr. Ackley's letter. He said, "George and I used to argue the subject on bullets. I found a long time ago, when I first started building these things (wildcat outfits) that it is necessary to have a relatively thick jacket. At least a tough jacket because most of these bullets have a fairly long spire point and that requires a 9-inch twist. When you steam up a thin jacket bullet with a quick twist barrel, the centrifugal force will spin the bullet apart, as you have experienced. George always argued that this was not true. The thin jacket would hold together just as well as a thick one, apparently in any caliber. So far as I am concerned, that is not so. The Barnes bullet (I suppose he means the 228-caliber Barnes bullet) is the



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only one being made now which will reliably stand the maximum velocity."

The 70-grain bullets that never reached the target from my P. O. Ackley Magnum came from 228 bullets that were basically designed for the Savage 22 High Power, which had an average muzzle velocity with the 70-grain bullet of roughly 2900 fps. The 228 averages out to around 3650. Because I had a number of slugs get lost somewhere in the 100-yard trip, I have to assume the bullets for the Savage High Power had thin jackets.

### Opposite Opinions

What strikes me strange about all this is that a top notch bullet designer and one of America's great gun builders would have such opposite opinions.

It is possible that there is a distinct relationship between the bullet length and the rate of spin, in a given caliber, needed to stabilize it in flight? Wildcat fans who worked with the 250-3000 Savage cartridge soon found out that the standard 1 in 14 twist of the 250 was too slow to stabilize bullets above 100 grains. The only cure was to increase the velocity to 3000 fps or better, but that was next to impossible in such a



**SHOOTERS can use charts and graphs to determine what rate of twist is best for the bullet being used, but the best method is finding out for yourself on the range, by using different weights and styles of bullets.**

small case. Shoving the 250-3000 case into a 22-250 sizing die transforms the case to a 22-250. There is not much flexibility in the case as far as powder capacity goes.

When Charles Newton designed the 250-3000 for Savage, his intentions were to use 100-grain bullets, at velocities around 2650 fps. Savage was more interested in getting 3000 fps velocity, and Newton had no alternative but to use an 87-grain bullet. That could be the reason for the slow 1-14 twist, which is adequate for lightweight bullet stabilization.

### **Not Every Bullet**

We can see that the rate of twist in a barrel will not stabilize every bullet weight with the same degree of efficiency. If we come to grips with this problem, the truth might reveal that only one bullet length and weight is being properly stabilized by the twist in your favorite varmint or big game rifle.

Just how do the gun builders come up with a happy medium?

For the most part, mass produced rifles are rifled for the heaviest bullets that can be used in that particular chambering. Some over-spin will occur with lighter weight bullets, but not enough to destroy their accuracy or spin them out of their jackets.

Going to extremes on making a fast twist brings to light another bit of information from P. O. Ackley. He told me he made a 5½ twist in a 224 barrel. He figured the bullet was spinning close to 600,000 times a minute (normal spin rate is usually less than half Ackley's estimate). He said at 35 yards, it made holes the size of a 45 caliber slug. He then switched to a 50-grain Barnes bullet, and had no more problem with keyholing. He tried it on prairie dogs at longer distances, but said, "The thing was throwing curves, probably caused by the excessive rotation, resulting in what is called 'excessive yaw'."



The velocity loss is greater than rotation loss. When a bullet's rotation loss is significant, it becomes unstable. This is one answer to keyholing at long ranges. If the bullet has lost a high percentage of its spin, it will tumble through a large game animal. While this might sound beneficial, because it seemingly would result in a lot of damage, it isn't. It's the gyrational spin of the bullet, after hitting the target, that turns loose the centrifugal forces and causes the bullet to fragment somewhat. These forces have been held in check, over the long journey, by the bullet's jacket. When this happens, as it should, it's not uncommon to find what I call "secondary missiles"—pieces of lead and jacket material—far from the bullet's path. A tumbling bullet does not impart a centrifugal force, hence it will not create as much damage.

How can the hunter know if the twist is right for the bullet being used? Well, there are graphs and charts that will technically explain this, but the best method is to find out for yourself. Study the results, from different weight and style bullets, on the 100-yard range. My friend Milt Anderson refers to this as "empirical"—relying on observation without due regard for system or theory.

Personally, there's not too much to worry about, unless you are a die-hard

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specialist. If that's the case, you'll have to start from scratch and have a barrel rifled for one particular bullet, or else use just one style of bullet in your rifle. Now that's a real twist of the tail or tale of the twist.

## State Deer and Bear Scoring Program Slated for April

The Pennsylvania Game Commission will be conducting official deer and bear measuring sessions this coming April at our six region offices. Only deer and bear taken in Pennsylvania are eligible. Measurements will be taken by certified Boone & Crockett scorers and entered among the agency's official records. Scoring sessions will be held from 9 a.m. to 3 p.m. on: April 9 at the Northwest Region Office, three miles south of Franklin on Route 8; April 8 at the Southwest Region Office, 339 W. Main St., Ligonier; April 9 at the Northcentral Region Office, two miles south of Jersey Shore on Route 44; April 9 at the Southcentral Region Office, one mile west of Huntingdon on Route 22; April 8 at the Northeast Region Office, at the intersections of Routes 415 and 118, Dallas; and on April 23 at the Southeast Region Office, seven miles north of Reading, one mile off Route 222 on Snyder Road.

# *In the wind*

bob mitchell



Last October the Wyoming Game and Fish Department set up a game check station along Interstate 80. With federal agents and wildlife officers from nearby states assisting, all noncommercial vehicles were stopped, and those carrying hunters or fishermen were checked. During the four days the check station was operated, 1424 vehicles carrying 2116 sportsmen were checked. Only 116 violations were found, and only 86 citations were issued. The most common violation was transporting game without either a license or interstate game tag.

For conspiracy, receiving bribes and smuggling, a U.S. Fish and Wildlife Service inspector was sentenced to a year and a day in jail and five years probation, and was ordered to perform 2000 hours of community service. As reported by the Izaak Walton League, the inspector, working in Los Angeles, illegally imported 50,000 protected animals.

**In a 6-1 decision, the Arkansas Supreme Court recently ruled that the state legislature can control hunting and fishing license fees, but that it can't dictate how the state's Game and Fish Commission spends the money.**

Last year 90 hunters took 72 elk in Michigan's sixth consecutive limited hunt. Unlike the previous hunts, however, which were held only in December, an October season was offered last year. Department of Natural Resources officials made the change so hunters would have access to the problem animals while they were still on public land, before they moved to their wintering grounds on private lands.

Following an unsuccessful turkey reintroduction attempt in 1980, using 50 pen-raised birds from Pennsylvania, the Delaware Division of Fish and Wildlife tried again, in 1984, using wild birds. A dozen from Pennsylvania and 22 from Vermont and New Jersey were released. Over the five breeding seasons since then, Delaware's turkey population has grown to 350, and the birds are occupying a 150-square-mile area.

Researchers at Cornell University reported an outbreak of "songbird fever" last spring in New England, Pennsylvania and New Jersey. According to the Wildlife Management Institute, the "fever" is actually salmonella poisoning, a bacterial disease spread through feces, which, of course, can be especially concentrated around bird feeders. It's suggested that feeders be thoroughly cleaned and disinfected with bleach, and that people refrain from feeding birds in spring and summer, when bacterial growth is greatest. Researchers were alerted to the outbreak by veterinarians who noticed a large number of domestic cats were being treated for the disease.

**Culminating a 15-year effort, the Texas Parks and Wildlife Commission recently acquired one of the ten largest cattle ranches in the state. The 215,000-acre site was purchased for \$8.8 million. It provides habitat for at least 11 endangered plants and animals, along with a rich variety of biological and archaeological features.**

Kansas officials are almost certain two moose were inhabiting the state last year. It's suspected that the animals came from Montana by following the Missouri River, as there were reports of them as they crossed the Dakotas and Nebraska. Nobody knows why the animals made such a journey. Some think that despite their apparent good health, the moose may have been infected with brainworms.

**Answers to Game:** 1) Rodents  
2) Burrows 3) Whistle Pig  
4) Sensory 5) Hibernate  
6) Foxes 7) Hunted 8) Teeth  
**Final Answer:** Punxsutawney





*Last Glance*, by Jack Paluh, is the seventh limited edition fine art print available through the Game Commission's Working Together for Wildlife program. As with previous editions, *Last Glance* is limited to 600 signed and numbered prints. Image size is approximately 15 x 22½ inches, printed on acid-free 100 percent rag paper. Price is \$125, delivered; framed prints are an additional \$97.50. Limited numbers of 1986, 1987 and 1988 prints are still available. Order from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.



## Outdoor Recreation Maps

To help outdoorsmen discover more of what Pennsylvania has to offer, the Game Commission has produced six "Outdoor Recreation Maps." Each multi-color 24 x 36-inch map covers one of the Commission's field regions. Highlighted are Game Lands, State Forests and Parks, and private lands enrolled in the Commission's public access programs. Also depicted are municipalities, roads, waterways, and — giving the map a three-dimensional appearance — 100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. If you are not sure of which maps you want, write for a PGC map order form.



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## Do Something Wild

**W**ANT TO DO something wild? Then consider designating that all or part of your state income tax refund be sent to the Pennsylvania Wild Resource Conservation Fund. Modeled after similar programs in dozens of other states, the Pennsylvania Wild Resource Conservation Fund is designed to generate financial support for natural resource protection and management. The Fund\* receives donations primarily through income tax refunds, but also from direct contributions. Revenue is then used to finance research projects and management programs designed to help nongame animals.

An average of \$390,000 has been donated per year since the Fund was established in 1982. This money has been allocated for bird and mammal projects that the Game Commission oversees, and for fish, reptile and amphibian projects that the Fish Commission coordinates. Unlike maybe all other state checkoff programs, ours covers native wild plants, too, which the state Department of Environmental Resources has jurisdiction over.

Much has already been accomplished with this modest funding. Checkoff funds—along with Working Together for Wildlife funds—have been instrumental in the state's osprey and river otter recovery programs. After an absence of 30 or more years, ospreys are again nesting in Pennsylvania. River otters, once confined to remote areas of the Poconos are now established in the northcentral region of the state. Among the most important projects undertaken through the checkoff fund is the Pennsylvania Breeding Bird Survey. For the past five years volunteers have been systematically censusing breeding birds throughout the state. The results of this comprehensive project will direct research efforts for years to come, and also serve as a benchmark for measuring the success of future management programs and the effects of environmental changes. Companion surveys and special species projects are being conducted for mammals, fish and other animals and plants, as well.

Unfortunately, much more needs to be done than current funding strategies permit. Populations of grassland and wetland animals are continuing to decline, while a lack of manpower and funds prohibit even studies of the problems, let alone implementation of remedial actions.

Furthermore, the Fund is continually being threatened by competition from other special interest groups anxious to cash in on the checkoff system. A year ago, for example, taxpayers were given an option to have state income tax refunds donated to the Olympics. As a result, revenue for the Wild Resource Conservation Fund dropped more than 25 percent.

Much has been done over the past decade to ensure the future of our wildlife resources, but much more is passing by the wayside. Want to help? This tax season, "Do Something Wild." —*Bob Mitchell*

\*For more information write Wild Resource Conservation Fund, P.O. Box 1467, Harrisburg, PA 17120





**THE DISTURBANCE** I caused by opening the bench brought mama weasel into immediate action. With a high pitched growl, she streaked to the top of the sleeping bag pile, grabbed one of the nearly translucent young and dragged it back through the hole.

# Mama Weasel

By Bill Frazier

**W**HEN I started building a cabin in a meadow of the Sullivan County woodlands I quickly realized I needed a secure dry place to store my tools. To solve the problem, I bought a used, 19-foot trailer of unknown vintage and towed it to my building site. As an added benefit, the trailer also gave me a place to sleep on those nights when I felt like staying.

My cabin wasn't yet under roof when winter arrived, which meant the trailer had a home for another year. When spring came, and I could again drive to my isolated spot, I anxiously visited my future dwelling—and the trailer.

It was late in the evening when I arrived on that early spring night, and I

quickly began to warm things up a bit in the trailer. Later, I cooked supper and read awhile by flashlight before turning in for the night. I grabbed my flashlight and cleared the bench off so I could get to my sleeping bags, which I had stored inside. What greeted me was like finding an alligator in your swimming pool.

Laying on top of my sleeping bags was a dead red squirrel with five baby weasels feeding on it. Tiny, pink and blind, the inch and a half long, nearly hairless babies were suckling on dinner.

Weasels mate in the summer, but have delayed implantation, which means that the eggs float free in the uterus for a while instead of implanting and developing immediately. This strat-

egy results in the young—usually four to nine—being born in the spring, when there is more prey about that is easy to catch.

The disturbance I caused by opening the bench brought mama weasel into immediate action. She came flashing through a hole a mouse had chewed in the plywood sides and, with a high-pitched growl, streaked to the top of the sleeping bag pile, grabbed one of the nearly translucent young and dragged it back through the hole. I jumped back, startled by the explosion of motion.

Weasels have long slender bodies, generally seven to 15 inches in length (depending on the species) and can fit through most mouse holes. Being entirely carnivorous, their main prey are mice and other small animals. One of the most furious killers in nature, they sometimes go on killing sprees triggered by the smell of blood. They've been known, at times, to kill many more than they could possibly eat. They are able to kill animals several times their

size because of their incredible quickness and their method of zipping around an animal's backside and biting it in the spinal cord at the base of the skull. A small pile of dead mice under a log or stump is a sign that a weasel is about.

At one time it used to be a farmer's practice to train a dog to hate weasels by trapping a weasel and putting it into a barrel with a dog. Because it was dark inside and the weasel was so quick, the six-ounce ball of fury could give a dog quite a battle before the dog could get a hold of it. Sometimes the weasel could inflict a great deal of damage before being caught, and the dogs often would hate weasels so much that they'd go to any lengths to dig them out of their dens.

Only two weeks before discovering the weasels in my trailer, I had been reading a book which described an incident in which a coyote had attacked a weasel's young. To drive the attacker off, the mother weasel instinctively attacked, going right for the coyote's eyes. According to the account, the coyote had eaten two young, but quickly retreated from the mother weasel's relentless attack. The memory of this story surfaced in my mind like a U-boat off England's coast—dark and dangerous.

With my flashlight shining into the bench, I grabbed a stick. No use being defenseless, I thought. Although after seeing how quickly the brown streak moved, I knew I'd have a better chance trying to hit a flying wasp. I didn't want to kill the family, of course, just watch. If nothing else, the weasels would certainly keep the mice in check around my trailer.

Old mama weasel's pink nose poked back through the hole and she slithered over the sleeping bags and grabbed a second young and dragged it out by the scruff of the neck, much like a cat carry-

**SHE GRABBED** the last, wayward youngster and proudly pranced out through the hole, the black tip of her tail held high. I learned more about weasels in those two minutes than I had ever known.





ing a kitten. She returned again, but rather than grabbing another baby, she began to tug at the squirrel's tail. Drawing herself up inchworm fashion, she dragged the squirrel through the hole, with two babies still sucking on it, unaware they were on a moving feast.

Now there was only one left, and it fell down into the folds of a sleeping bag, squirming with wrinkled bald feet pawing the air. When mom returned she went berserk. I have never seen any animal move with the quickness and agility that weasel did, searching for her misplaced baby. It was all I could do to keep the flashlight beam on her as she bounced around inside the bench. In just a few seconds she covered the inside of the cubicle at least half a dozen times before stumbling across the mewling young one. She grabbed the last, wayward youngster and proudly pranced out through the hole, the black tip of her tail held high.

I learned more about weasels in those two minutes than I had ever known. But now I had the opportunity to learn even more, more by "first nose" than firsthand.

Weasels belong to the family Mustelidae. Members are characterized by their relatively small size; long, low-

slung bodies; short legs; short, rounded ears; and thick silky coats. Along with weasels, the family also includes mink, otter, badger and skunk. Like most of their cousins, weasels have paired anal scent glands which produce an odor very similar to a skunk's.

### Worked Overtime

That little bit of knowledge didn't help me appreciate what they had done to my sleeping bags. There was a nest made of mice fur in one of the folds of the bag, and they obviously didn't believe in outdoor toilets. Their scat—long, slim dark droppings one to two inches long, containing bits of fur and bone—had been deposited all around the nest, and their scent glands must have worked overtime to mark my sleeping bag as their own. I also found two dead mice, probably the former owners of the bench, cached under another fold of the bag.

I was defeated. My nose wouldn't allow me to sleep in the bags, and it was too cold to not use one, so I returned home for the night. I returned the next day to find all the weasels gone, but my smelly sleeping bags still remain. It would have been nicer to have had only their memory linger.

## Land Ethics—A Last Call

The Pennsylvania Wildlife Federation is sponsoring a special one-day conference, "Land Ethics—A Last Call," a public educational program covering the future of wild lands and outdoor sports. It will be held at Millersville University, Saturday, March 11, from 9 a.m. to 4 p.m., and cost \$10. Jack Lorenz, Executive Director of the Izaak Walton League, will present the keynote address. Next, a panel of three fish and wildlife experts will discuss what's happening to sport hunting in other states and the future of hunting and fishing in Pennsylvania with regard to land access, urban development, pollution, and the impact of certain township ordinances on outdoor sports. A choice of two afternoon sessions is offered. One will deal with case histories of two public areas in Pennsylvania—Presque Isle and Gettysburg National Park. The other will cover our State Parks and State Forests, their original purposes and future goals. If you're concerned about what the future holds for hunting and fishing in Pennsylvania, plan to attend this conference. For more information contact the Pennsylvania Wildlife Federation, 2426 North Second St., Harrisburg, PA 17110 (717-232-3480).





## From Farm Boy to Mountain Man . . .

# Zenas Leonard

By Amos Dague

**E**XCEPT FOR an occasional feature in the local outdoor sports column, or an editorial swipe from some misguided critic, today's fur trapping business seldom gets much mention in the daily press.

But there was a time when the exploits of restless young men, seeking their fortunes on the trapline, frequently attracted the attention of newspaper editors.

In the heyday of the continental fur trade, during the 1820s and 1830s, the pioneer fur trappers who blazed the first trails through the Rocky Mountains were popular heroes here in the East.

Back then, newspapers eagerly told the rambunctious adventures of those fur seekers, known as the Mountain Men, in vivid detail and in all forms of fact and fiction.

According to historians, one of the most remarkable stories surviving from that colorful era is the firsthand account of a western Pennsylvania farmboy, whose four-year adventure in the Rocky Mountain fur trade appeared serially in his hometown newspaper.

First published in 1835 by the long-defunct (Clearfield, Pennsylvania) *Pioneer & Banner*, this serial recounted the journal written by a local native named Zenas Leonard. In it, Zenas described his experiences trapping for furs and trading with the Indians in the Far West.

Zenas Leonard was born March 19, 1809, on a farm his father cleared about two miles east of Clearfield. He was the fifth of nine children in his family.

Old histories of Clearfield County tell that Zenas Leonard's grandparents—Patrick Leonard and Margaret Thompson—came to Pennsylvania from Ireland sometime before the Revolutionary War.

His grandfather was a back-country entrepreneur, who traded with the Indians along the Susquehanna River between Harrisburg and Sunbury.

Patrick eventually settled down to farming on a place about three miles above Harrisburg, where Zenas Leonard's father—Abraham Leonard—was born, on July 11, 1777.

Abraham Leonard married Elizabeth Armstrong and took up a pioneer farm life near the foot of Warrior Ridge in Huntingdon County.

In the spring of 1803, after several precarious years, Abraham Leonard came to what is now Clearfield County and settled near the mouth of Clearfield Creek. He made his clearing and cabin, and brought his family there early the following year.

Though opportunities for schooling were meager in that early settlement, Zenas Leonard received at least a grade school education.

But the son of a farmer in the backwoods had to get his education more by chopping down trees and plowing around stumps, than by reading books and attending school.

The country in which Zenas Leonard grew up was then an unbroken forest wilderness.

Indians, though friendly, were still numerous in that area, and the scream of the panther was not an uncommon sound.

Bears and wolves were so common as to be troublesome to the settlers, often attacking and killing their livestock.

Deer was the chief source of summer meat—sometimes for the entire year.

If a deer was killed in the winter and dragged home on the snow, the wolves would often start howling and follow the trail almost to the door.

Hunting was the general pastime of

that day. If a hunter couldn't hit from two to four deer a day, each day he hunted, he considered it poor luck.

As soon as a boy was old enough to shoot offhand, he took his gun with him everywhere. Generally, the only money a youngster was allowed to spend was what he made from trapping.

The rigors of Leonard's pioneer youth in that vast wooded country west of the Allegheny front contributed much to his later success as a mountain man in the Rockies.

But it was his basic skills with pencil and paper that set Leonard apart from the majority of his fellow trappers and eventually led to his fame as a chronicler of the Rocky Mountain fur trade.

For Zenas Leonard, farming seemed a hardscrabble living. In the spring of 1830, on the morning of his 21st birthday, Leonard reportedly told his father, "I can make my living without picking up stones." His father replied that he was free to do so, whereupon Zenas Leonard left home and set out to make his fortune in the Great West.

After a brief period clerking in his uncle's store at Pittsburgh, Leonard packed up again and went down the Ohio River to St. Louis.

There, at the capital of the fur trade, Leonard signed on as a clerk to a company of beaver trappers bound for the Rocky Mountains.

Quoting from Leonard's journal, "The company, under the command of Captains Gant and Blackwell, left St. Louis on the 24th of April, 1831. Each man was furnished with the necessary equipment for the expedition—such as traps, guns etc.; also horses and goods of various descriptions, to trade with the Indians for furs and Buffaloe Robes."

Leonard went in and beyond the great wilderness of the Rockies. For four years he lived the life of a mountain man, seeking the hard-earned profit in beaver pelts.

In the preface to Leonard's journal the publisher states, "the reader will encounter no improbabilities, much less impossibilities: hence it is but reasonable to suppose that in traversing such a wilderness as lays west of the Rocky Mountains, such hardships, privations and dangers as those described by Mr. Leonard, must necessarily be encountered."

Leonard faced all the dangers that threatened those hardy adventurers—brutal weather, starvation, grizzlies and hostile Indians—and recounts numerous instances of his experiences.

Stranded by a blizzard his first winter, Leonard set out with a party that tried in vain to get across the mountains to Sante Fe for supplies—a distance of 800 miles.

"Here we were," wrote Leonard, "in a desolate wilderness, uninhabited (at this season of the year) by even the hardy savage or wild beast—surrounded on either side by huge mountains of snow, without one mouthful to eat, save a few beaver skins—our eyes almost destroyed by the piercing wind, and our bodies at times almost buried by the flakes of snow which were driven before it. Oh! how I wished myself at home; but wishing in such a case appeared useless—action alone could save us."

By roasting and eating their beaver skins, Leonard and the others managed



LEONARD went in and beyond the great wilderness of the Rockies. For four years he lived the life of a mountain man, seeking the hard-earned profit in beaver pelts.



to survive until at last they found and killed a couple of straggling buffalo.

There were other misfortunes besides the freezing cold peculiar to the trapper's profession in that region.

In the trappers' pursuit of pelts, grizzly bears often harassed them, and many times the hunter wound up being the hunted.

In one encounter with a grizzly bear Leonard relates, "After having cooked and eat our evening repast, I was standing close to the rock, apart from the other men ten or twelve feet—all at once one of them jumped up and ran off, exclaiming 'the bear, the bear!' I instantly cast my eyes to the top of the precipice, where they encountered this hideous monster seated on the rock with his mouth wide open, and his eyes sparkling like fire. My whole frame shook with agitation. I knew that to attempt to run would be certain death. My gun was standing against a tree within my reach, and after calling for the aid of my companions, I raised my rifle to my face and taking deliberate aim at the most fatal spot, fired—which brought sir Bruin to the ground."

A few weeks afterwards, Leonard fought in the so-called Battle of Pierre's Hole, the most famous of the many Indian brawls in which the mountain men engaged.

The battle took place on July 18, 1832, near the Teton Valley in Idaho, where the trappers had just held their annual rendezvous.

There, surrounded and heavily outnumbered, a band of hostile Gros Ventres Indians held off, and eventually eluded, several hundred trappers and their Indian allies—the Flatheads and Nez Perces.

Among the casualties of the day-long fight were 26 Gros Ventres and 32 trappers and their Indians.

Though in his own account Leonard didn't take the hero's part, other eyewitnesses reported that he was in the first onslaught against the Gros Ventres' position, and that he got closer to them than any of the other attackers.

In July of 1833, after working a year as

a free trapper, Leonard embarked on an expedition to California, led by the legendary mountain man, Joseph Reddelford Walker.

Although this venture didn't produce any furs, historians regard it as the first American exploration to the Pacific coast by way of the Sierra Nevada Mountains.

It was on this trek to California, in October of 1833, that Leonard witnessed and recorded one of the most spectacular discoveries in the whole exploration of the West.

Traveling along the mountain divide between California's Merced and Tuolumne rivers—exhausted and nearly starved from a three-week climb over the snow covered Sierras—Leonard described the first view of the Yosemite Valley ever seen by white men.

Numbed by his arduous journey, Leonard wrote offhandedly, "We traveled a few miles every day, still on top of the mountain, and our course continually obstructed with snow, hills and rocks. Here we began to encounter in our path, many small streams which would shoot out from under these high snowbanks, and after running a short distance in deep chasms which they



#### Question

If I find an injured deer along the road can I legally put it out of its misery?

#### Answer

No. Only Wildlife Conservation Officers, Deputies and authorized police officers are allowed to dispatch injured wildlife.

have through ages cut in the rocks, precipitate themselves from one lofty precipice to another, until they are exhausted in rain below. Some of the precipices appeared to us to be more than a mile high."

When they were finally over the Sierras and into the Yosemite Valley below, Leonard noted: "In the last two days traveling we have found some trees of the red-wood species, incredibly large—some of which would measure from sixteen to eighteen fathom round the trunk at the height of a man's head."



This entry in Leonard's journal is the first recorded reference to the world's largest trees—the giant sequoia redwoods. These great trees were so remote, they remained virtually unknown to the world-at-large until after their rediscovery in 1852.

After a difficult trip back to the Rockies from California, the fall of 1834 found Leonard living and hunting buffalo with the Crow Indians around the Yellowstone River.

By the mid-1830s the rising demand for buffalo robes was challenging beaver pelts as the chief product of the Rocky Mountain fur trade.

In his observations on the Crows, which are among the earliest detailed accounts of that Northern Plains tribe,

Leonard described their method for hunting buffalo.

"When the day arrives (for a general hunt) the village is alive betimes in the morning, and several hundred will sometimes mount their race-horses and repair to a certain designated section of the country, which they are to surround. When the men have all had time to get to their allotted stations, they begin to close in, driving the game, principally buffalo, into a circle, and when they are pretty well confined in the circle, they commence killing them—until which time, no man dare attempt to take any of the game."

Zenas Leonard, as well as a number of other trappers, left the mountains for good in 1835.

BY ROASTING and eating their beaver skins, Leonard and the others managed to survive until at last they found and killed a couple of struggling buffalo. But there were other misfortunes peculiar to the trapper's profession . . .

The promised bonanza had been overblown, and the local economy was changing away from trapping and going more to trading.

Leonard returned to Clearfield, Pennsylvania, in the fall of 1835 with only \$1100 to show for his four years in the fur trade.

As might be imagined, his family and friends were overjoyed at his unexpected return. Except for a report saying that he'd perished along with most of his company, they'd had no word of him since he left the mountains.

Leonard intended to stay in Clearfield for only a short time and then return to Missouri.

But at the insistence of a local newspaper editor named William L. Moore, who was married to Leonard's sister Hannah, Zenas Leonard remained long enough to enlarge the journal he kept of his travels and give it to Moore to publish.

In the preface to the original newspaper version of Leonard's narrative, Moore indicates that Leonard had to rewrite the first two years of his experi-



ences, because that portion of the journal had been taken from him by Indians.

Moore edited the beginning of Leonard's journal, which described his trip from St. Louis to the Laramie River and his first winter hunting and trapping in the Laramie Valley, and published it in his newspaper the *Clearfield Pioneer & Banner*.

Titled "Interesting Narrative—The Rocky Mountains," it appeared in seven installments, beginning in November 1835 and running until February 1836.

Then a dispute erupted between Moore and the editor of a rival newspaper over the accuracy of Moore's editing job, as well as his right to publish the journal.

Though he denied any wrongdoing, Moore stopped publishing any further episodes. Shortly thereafter, Moore's competitor went out of business.

Meanwhile, Leonard had gone back out West, to the site of old Fort Osage, where he'd passed before on his way to the Rockies in 1831.

There, at what is now the town of Sibley, Missouri, he set up a trading post and began outfitting traders headed west and trading for furs with the Indians.

In January, 1839, Williams L. Moore sold the newspaper, then known as the *Clearfield Banner*, to his brother D. W. Moore.

Responding to the interest generated from the suspended serial, the new publisher brought out the complete account of Leonard's journal. This time,

however, he published it as a little paperback book of 87 pages, entitled *Narrative of the Adventures of Zenas Leonard*.

The first edition, published at Clearfield in 1839, is now one of the rare pieces of Americana, having brought \$6250 at auction in 1968. Rare book dealers anticipate that whenever the next copy comes up for sale, it may come close to tripling that price.

Since that first edition was published, it has been reprinted several times, most recently in 1966 as the *Adventures of Zenas Leonard*.

As for Leonard, he married a Kentucky girl named Isabell Harrelson and fared quite well for awhile in his trading enterprise at Sibley. Then on July 14, 1857, at the relatively young age of 48, Zenas Leonard died, apparently stricken by cholera.

In its matter-of-fact, day-by-day account of difficulties and discoveries, Leonard's narrative has its own special kind of impact.

Sometimes ungrammatical, sometimes confusing, Leonard nevertheless has given us one of the very few authentic firsthand accounts surviving from that brief but vital epoch in our country's rich history.

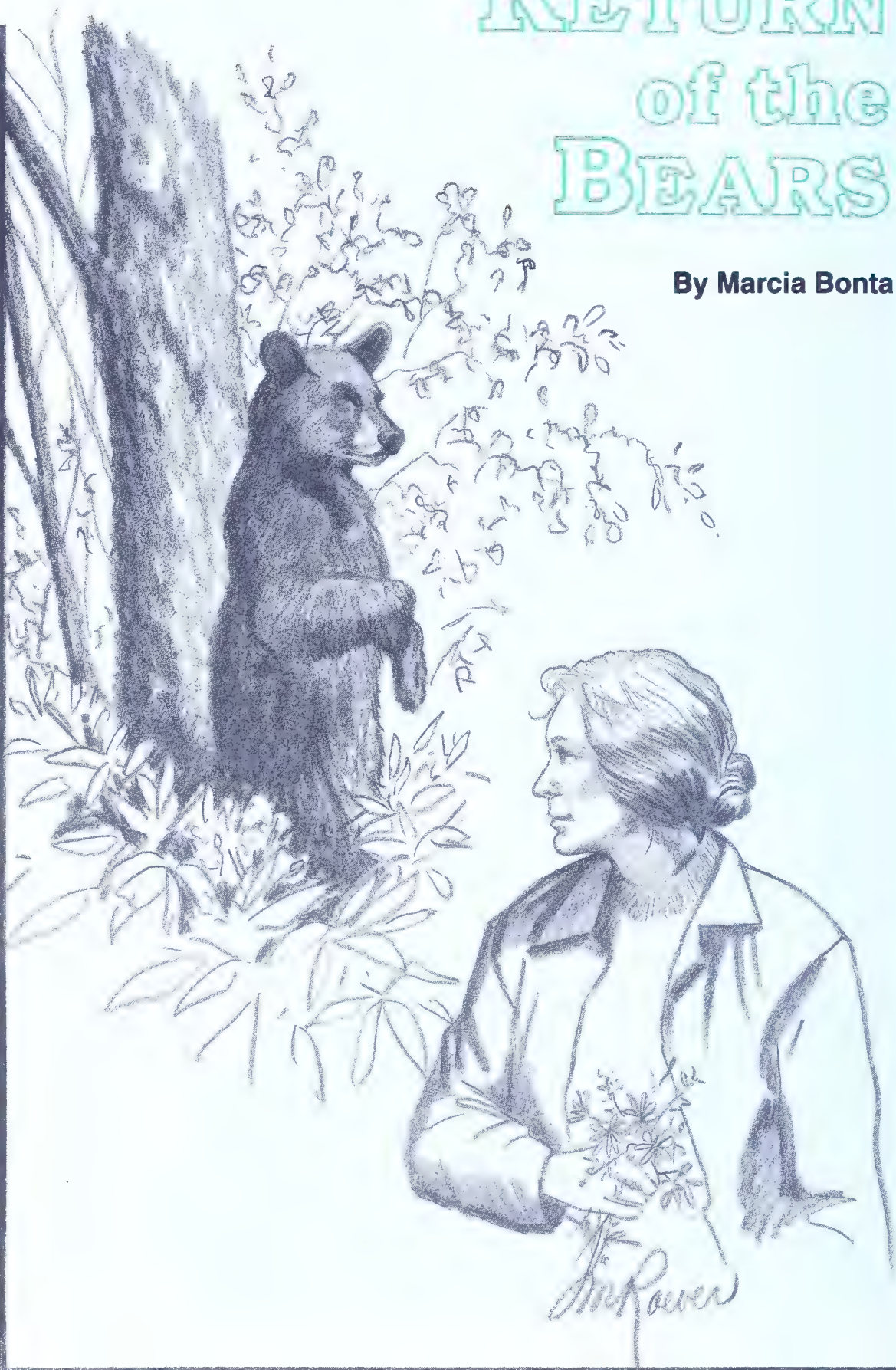
It's that heritage, that love of adventure and the outdoors, from Zenas Leonard—a farmboy from the Alleghenies turned mountain man in the Rockies—that walks silently along the traplines with every sportsman and part-time trapper in Pennsylvania today.

### Cover Painting by J.M. Roever

Many black bear cubs will see their first light of day this month. At an age of two to three months, cubs will begin venturing forth from the dens where they were born to explore the outside world. Bears have become more widely distributed in Pennsylvania over the past decade. Once confined, for the most part, to the impenetrable wetlands of the northeast and the remote mountains of the northcentral, black bears are now found just about everywhere but the most urbanized areas of the state. For a landowner's view of what this range expansion means see Marcia Bonta's "Return of the Bears," beginning on page 12.

# RETURN of the BEARS

**By Marcia Bonta**





**N**OBODY NEEDS to convince me that the Game Commission's black bear research and management efforts have increased and extended the population in Pennsylvania. I know from firsthand experience.

For over ten years on our central Pennsylvania mountaintop I never saw a bear. One neighbor claimed that several years before we had moved there a bear had torn her beehives apart and that it was promptly live-trapped and removed by the local wildlife conservation officer. Since then her hives had not been molested.

Disappointed that no bears roamed the mountain, my husband and I compensated by raising bees ourselves. But I maintained loudly that if it came to bees or bears, I would take the bears. And, in the spring of 1983, I did just that. The previous fall, after three successful—bear-less—years of beekeeping, one hive was damaged. And, despite a well-baited Game Commission trap, the bear was not caught. Then, on a beautiful morning in May that bear, or another one, returned to tear apart all three of our hives. The hives were relegated to the barn. I now had bears instead of bees.

But I had yet to see one. Still, every walk I took held a new element of expectation. Of course, I never stopped to wonder what I would do if I *did* see a bear. I wasn't worried though. Black bears hardly ever menace human beings unless they are accustomed to handouts from people, or maybe defending cubs, and even so they are more likely to run than attack.

So the books maintained, and so I believed. Such knowledge, however, did not stop the tremor of fear I felt a year later, in late June, when what I thought was a large black dog ahead of me on the trail suddenly stood up. Nearsighted as they are, this one did not see me and I hesitated. Should I press on or retreat? I retreated, turning slowly around and walking back the way I had come. But I kept looking over my shoulder. The movement finally alerted the bear that something was there and it stood up on

its hind legs again to get a better look. When it did, it fled, just like the books had said.

It wasn't a large bear, probably a juvenile which had just been sent on its own way by its mother. June is dispersal and mating time for black bears, and after a year and a half its mother would have been ready to mate again.

In Pennsylvania black bears may mate from mid-May until mid-September, but because the fertilized eggs do not implant on the sow's uterus and begin to grow until late November or early December (a process known as delayed implantation), all cubs are born around the same time, in January, after a six *week* developmental period.

### Tiny Cubs

Naturally, those cubs are tiny, averaging just 12.8 ounces at birth, and they look more like guinea pigs than black bears. Except for their tiny, underdeveloped ears, they are covered with hair about one-tenth of an inch in length. Newborn cubs cry loudly when they are cold and crawl short distances toward warm objects, namely their mother, who keeps them fed and sheltered for the next two months in the den she constructed the previous fall. The den can be in or under a tree, in a rock crevice or cave, which she has lined with a soft bed of leaves, grass, moss and stripped bark.

The sow eats an average of 20,000 calories a day prior to denning and has built up a four-inch layer of fat. She will need every bit of it, though, because once she settles down in her den in late November, she won't eat or drink until she leaves the den the following March. Neither does she urinate or defecate. In fact, her rectum is blocked by what scientists call a "fecal plug" which consists of dry leaves, pine needles and pieces of hair mixed with her intestinal mucus. Yet she continues to burn 4000 calories daily and maintains her normal body temperature. Her heart beat, however, does slow down from 40 beats per minute during summer sleep to eight beats in winter hibernation. After her cubs are born she nurses them, and because

she is able to turn her own waste products back into protein, she actually emerges from hibernation with more protein in her body than when she first entered her den.

By March her cubs weigh two pounds, are well-furred, and have opened their eyes. Although they are still nursing at two months of age, they also begin to eat solid food, but they are not fully weaned until they are seven months old. By fall many Pennsylvania bear cubs weigh nearly 100 pounds.

### Big Bears

What makes Pennsylvania bears so big? Probably the wide availability of both wild and cultivated foods. In the Poconos, where black bear density is as heavy as one bear for every square mile, the swamp/lake ecology encourages a large crop of berry-producing shrubs which is excellent bear food. The north-central counties of Elk, Clinton, Lycoming and Cameron, which support around 60 percent of Pennsylvania's bear population, are heavily covered with oak, black cherry and beech trees and hence have a good supply of acorns, fruits, and beechnuts for the bears.

But bears are opportunists. They eat everything from carrion to grasshoppers, corn from a farmer's field to garbage at local dumps. However, as much as 75 percent of their diet is made up of

plant foods, which is why wild areas interspersed with small farms are their favorite habitat.

My own county was listed as marginal bear habitat in 1981. Nevertheless, it has all the food a bear could want, not only in our predominantly oak-black cherry forest, with its understory of blueberry and mountain laurel, but also in the adjacent farming valleys with their large crops of field corn.

Maybe that's why the bear my husband and I saw 367 days after my first sighting was so huge. We had gone walking after dinner, seduced by the cool, clear breezy weather, and were talking quietly as we hiked along the ridgetop. Then, off in the woods, we heard loud rustling noises. While we stood speculating whether we were hearing turkeys or deer, an enormous black bear ambled out on the trail 100 feet ahead of us. It turned to face us, still down on all four feet, sniffed the air, and then, with several loud "woofs," ran back into the woods.

We continued quietly on our way, and as we neared a curve in the trail, we heard a loud "woof" just 25 feet below us. Again we had intersected with the bear, which was apparently trying to cross the trail and continue over the mountain. This time it moved only a short way off in the woods, and we could see it waiting for us to move on. When we did, it "woofed" and ran deeper into the woods.

I could not believe how much bigger this bear was than the one I had seen the previous year—over 300 pounds my husband estimated—and coal black, just like the other bears I had seen. Yet all the bears, including one I surprised up a tree the previous summer, had run as soon as they saw a human. Obviously the bears on our mountain are truly wild bears, unlike the panhandlers that seize packs from hikers in the Great Smoky Mountains National Park.

**BEARS are opportunists. They eat everything from carrion to grasshoppers, corn from a farmer's fields to garbage at local dumps. However, as much as 75 percent of their diet is made up of plant foods.**





The bears have definitely returned to our mountain, but they probably don't permanently live here yet. After all, males range up to 12 air miles and sows five. Then too, all our sightings have been in late spring and summer, when bears are most apt to wander, and we have yet to see a female with cubs.

But I am beginning to notice more bear sign—occasional piles of scat on the trails or stumps torn apart in search of insects. The latter sign, on a trail only a few hundred feet from our house a year ago last July, alerted me to the possible close presence of a bear as the few ants left in the stump were still milling around in confusion and making an attempt to carry off the exposed larvae. Surely a bear had been through recently.

With that in mind, I walked very quietly for another half mile until I heard rustling in the woods. I stopped and peered into the thick underbrush but I could see nothing except one tree-top shaking. Yet there was nothing in it as far as I could tell. So I crept on. Again I heard rustling, only this time it was accompanied by aspirated noises that sounded like a deer starting its alarm call.

Deer or bear, I argued with myself and moved still closer to the sound. Twenty feet ahead of me, another trail joined the one I was on, and I suddenly realized that whatever I was hearing was walking up that trail. I paused, just as a huge black bear reached the crossing. Judging from its surprise as it turned its head toward me, "woofed," and then went running full speed up the trail and into the woods, it had not known I was there until the last minute.

My latest bear encounter occurred

one day last May near dusk when our son peered out our bow window to find a bear peering in at him. I rushed downstairs when he called and was rewarded with a view of a medium-size black bear ambling down the slope beneath our window, past the old apple tree, and up into the woods of Laurel Ridge. Although it never came back I had been forewarned for weeks of its presence on our mountain. During one evening walk, I had noticed a black animal at the top of the powerline right-of-way just enough over the crest so that even through binoculars I could not get a good look. Several nights later I heard a noise on the back porch, but when I went to investigate I found only the shredded remnants of an old pillow I had put out in the trash, spread across the slope. The following night I awakened to hear my canning pot rolling down the porch steps. Even then I did not suspect a bear until I discovered a large pile of bear scat on the powerline right-of-way only a few hundred feet from our home one evening, followed by the stripping of wood from a power pole the next morning.

So in four years I have had five peaceful bear encounters. Each has been a heart-stopping thrill, the kind of wildlife experience that all outdoor people hope for when they walk in Penn's woods. I am grateful I live in a state that encourages black bear research and that such efforts have increased the bear population. For a wildlife watcher like me, the opportunity to see what most people consider the most exciting wild animal in eastern North America is what keeps me in the woods 365 days of the year. Now if only a sow or two finds our mountain!

## Thoughts While Walking

*To waste, to destroy, our natural resources, to skin and exhaust the land instead of using it so as to increase its usefulness, will result in undermining in the days of our children the very prosperity which we ought by right to hand down to them amplified and developed.*

—Theodore Roosevelt



**MANY TRAPPERS**, when laying steel for a new leg of their trapline, shudder or call it quits when they see evidence that another trapper has been through before them. For the life of me, though, I can't figure out why.

## *Following Another Trapper's Footsteps*

**By Joe Kosack**

**D**YED-IN-THE-WOOL trappers frequently find themselves following in the footsteps of other trappers, especially as the season progresses. But there are worse trapline conditions a furtaker could traipse through, and besides, cleanup trapping can be very rewarding.

Many trappers, when laying steel for a new leg of their trapline, shudder or call it quits when they see evidence that another trapper has been through before them. For the life of me, though, I just can't figure out why. After all, little can be determined from the remnants of an old trapline.

For instance, let's say it is the second week of season and you just hopped out of the truck to make coon sets along a creek that appeared to be very promising when you prospected in October. You no sooner slide down the bank at the waterway's roadside culvert when

you notice where another trapper had punched a pocket set into the bank during the opening week, but has since pulled the trap. Upon closer inspection of the area, you spot what appears to be a torn pattern made by a trapped furbearer. Your enthusiasm begins to wane. But why? Surely the pattern of one trapped critter doesn't represent the area's entire furbearer yield. Still, within five minutes, you'll have convinced yourself that it does and push on to another area.

Last year first-week pockets and cubbies were common on some of the late November creeks I trap. However, I didn't abandon those seasonal ringtail-producing waterways without first giving them the once-over, especially because an early, but heavy, snowfall and a few creek-raising storms played a big role in reducing raccoon activity along waterways, and most everywhere else.



In reviewing the creeks, I first looked for fresh tracks on the sandbars and for leftover bait in the old sets. In some cases, the old sets had been picked clean and paw prints were found in the bait cavities, or there were coon tracks along the water's edge. But not always; sometimes there were no obvious indicators of furbearer activity.

Still, finding no slap-in-the-face sign along a creek that has been trapped by another doesn't mean the waterway won't produce; it means you have to look closer if you have that gut feeling that critters are still coming through. Maybe you'll have to crawl into a culvert or study the creek's bottom to find the partial tracks of a passing raccoon. You may have to look for dung around the base of big trees found near the creek. Whatever. The bottom line is you may have to put more effort into scouting than usual to uncover sign that others cannot.

Many trappers afield today don't have the patience to wait for furbearers under other than ideal conditions. First of all, they don't realize that a ground-covering snow or periods of heavy rain put a damper on raccoon movement and that they will have to keep their sets operable—demanding as it may be—until the furbearers resume their usual activities. Instead, they pull their traps and blame themselves, competitors or their selection of baits and lures for the lack of productivity. They rarely consider weather conditions, unless it is bitter cold. But from what raccoons have shown me over the years, cold November weather rarely keeps them curled up in their dens.

High water is another trapper-chaser because many furtakers are too lazy to remake sets or too concerned about losing a couple of traps to the rushing brown waters. But if such trappers would just hang in there until the creeks crest, they'd learn that just about every raccoon that lives in the creek's watershed will canvass the shorelines in search of washed-up treasures for the next few nights. Moreover, the high water will have little, if any, effect on muskrat activity, although the rodents

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will create new feedbeds if water inundates the ones topped with fresh cuttings.

Although weather conditions often shorten a trapper's time afield, there are other reasons furtakers yank their traps before they've taken what they came for. For example, a thief may spot a trapper heading out to check his traps one day and take what traps he can find the next. Could be the trapper wasn't very proficient in his pursuits of the sport, and after a few days of rising at 5 a.m. to check empty traps, pulled them in frustration. Whatever the reason, though, early trap-pulling happens a lot during the first two weeks of season and good trappers are wise to it.

#### More Cause

All right, so now you're thinking about a few potentially promising areas you should have visited after the first two weeks of season. Great, but allow me to give you more cause to take a look at areas hit by other trappers.

In many parts of Penn's Woods red fox trapping offers an array of irritations for early-season trappers, even the best of them. It's not that reds are too elusive to catch, it's just that the sets never seem to be ready for them when the foxes come through. Because of this, there is always a good number of reds to pursue in December and January.

Early-season fox trappers usually have to deal with keeping non-target critters out of their traps, and the timeless problems of freezing-and-thawing ground, rainy weather and squaw summers (reds tend to lounge during these times). As if that weren't enough, traffic in the fields is at its annual peak, with the small game season, and many hunting dogs that often find your set smells as appealing as the foxes do.

In light of these early-season problems, many red fox trappers pull their traps in frustration without ever taking a fox. About all they accomplish is reducing the area's population of skunks and opossums, and no follow-up canine trapper ought to have a problem with that.

Trappers who make fox sets in late December and January also have a couple of advantages on the canines. Cold weather usually forces reds to travel farther in their efforts to bag supper, and they tend to be somewhat less cautious when they happen upon the easy meal a set represents. Moreover, reds are quite interested in the smells of other foxes, with mating season just around the corner, and they often drop their guard to investigate the urine or gland lure smell emanating from a set. Because of these factors, late-season fox trapping is surely worth a frosty moustache and cold feet.

Did you ever hop out of your car to set a muskrat creek, see stakes strewn along or sticking up out of the bank, and then move on to another creek without taking a closer look? Yeah, I used to do the same thing, too, until I learned that most muskrat trappers use only body-

gripping traps, which confines their sets to the den entrances and runways they can find.

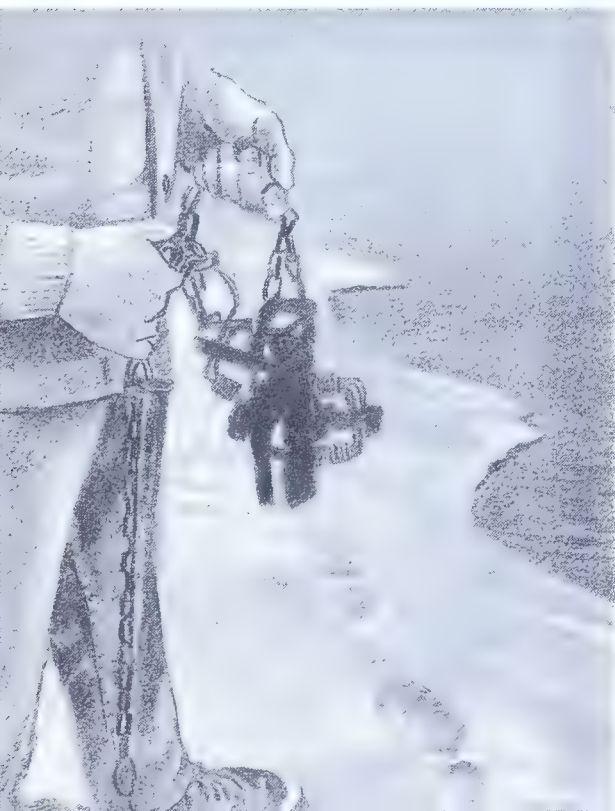
Now when I see stakes on the bank I ignore them because you'll never know for sure whether the creek was trapped properly unless you take a closer look. After all, sometimes a trapper like me may toss some stakes on the bank to keep the heat off the waterway until I can set it in the second or third week of season!

In most of the muskrat territory that I trap a good number of furtakers tend to pull their traps on the Sunday before the opener of buck season, which gives them only three days of trapping. If there's a hard rain that swells the creek, their season is even shorter. Now a nice pile of muskrats can be heaped up in three days by a good trapper, but it takes a lot of hard work on the opener, high densities of muskrats and cooperative weather. If you've ever set traps in the afternoon of the opener, I'm sure you've noticed that almost everyone else has gone home for turkey. It appears no one wants to put in the time and effort required to make a muskrat trapline sizzle for three days.

Considering the natural and self-imposed limiting factors that can affect a trapper's production during the initial week of season, it is obvious that a hard-working trapper can capitalize on the misfortune or confinements of others by keeping his traps out there in the latter weeks of season. I know, I've been doing it for years.

So the next time you are fishing for trout or are rabbit hunting and see furbearer sign, remember that you don't have to wait until next year to trap these critters. Don't reflect with "I should have" excuses; go get those traps and do it! Who knows, you may find yourself looking forward to January in years to come.

**IT'S OBVIOUS** a hard working trapper can capitalize on the misfortune or confinements of others by keeping his traps out there later in the season. I know, I've been doing it for years.







HE THANKED me and turned to go. But before he went, he turned back and said something special, something that will come to mind whenever I think about my 1987 hunt. The little man said, "Good luck, buddy, and I really mean that."

## Thanks, Buddy

By Clarence W. Bundy

IT WAS a still crisp December morning, the third day of buck season. The sun was making its way to the horizon, casting rays of red and orange across the eastern sky. The day promised to be bright and sunny, the kind that makes a person glad to be alive. As I parked my truck I noted there were no other vehicles nearby—not a good sign.

While walking up a familiar logging road along Rockton Mountain in Clearfield County, I reminisced about seasons gone by. I stopped at the edge of the laurel and gazed at the early morning light above a distant ridge. It was in that thick laurel, just off the ridge, some 20 years ago, that I bagged my largest buck ever, a beautiful 10-point. The mounted rack still graces the hideaway room in my garage.

I moved silently in the freshly fallen snow, making my way towards the ridge

where my youngest son, with the help of his brother, had shot a 3-point the day before. Maybe, with some luck, somebody would push one to me this day.

I reached my stand about 7:30. The air hung still and quiet in the valley. Carefully taking note of my surroundings, I became somewhat disappointed to see there were no other hunters around. I was hoping I wouldn't have to be the one to take the plunge in to the thick laurel below. Maybe some hunters from the nearby camps would save me the trouble, I hoped.

Scanning the ridge and the valley below, I noticed a flash of brown off to my right. Two doe appeared. They paused for only a moment before leaping in to the cover and safety. Apparently they had been routed from their beds. Maybe my wish was coming true.

It was at that instant I heard it—the



telltale nearby shot that told me a buck was in that group. I peered intently into the wooded area where the shot had come from. Within seconds, I saw the buck. It was a fine, heavy beamed 7-point. He came trotting right at me and then turned broadside. I raised my 06 and placed the crosshairs on his rib cage. Blood was clearly coming from its side. The deer stopped for a moment, scanned the horizon, and then it disappeared in the laurel. I lowered my rifle and waited. I knew what I would be seeing next—the hunter who fired the shot.

Sure enough, within moments, he came over the ridge, hot on the wounded buck's trail. He would have no trouble finding the deer in the snow. As he came to the point where the buck had stopped, he looked straight up at me. He had a worried look on his face, as if he thought I might take his trophy. I simply pointed towards the laurel. He took off like a beagle after a rabbit.

I couldn't help but feel that twinge of envy that all hunters feel when they see someone else has bagged a buck. I've had some lean years since the big buck, and letting that fine 7-point go by was not an easy thing to do. But, I knew in my heart it was definitely the right thing to do. Still . . .

I wasn't surprised when I heard another shot in the laurel, and then another. Once the echo had cleared, all was quiet. I decided to move to another location.

As I shouldered my rifle I heard someone approaching my stand from below. It was the other hunter, out of

breath and covered with sweat. He was a small, wiry guy, dressed in very old tattered hunting clothes, and with just enough blaze orange to satisfy the law. I looked away, hoping he would go right passed me. He didn't.

"Hey buddy," he called out, "do you have a knife?" He stopped just short of my stand to catch his breath. He looked a little embarrassed, and I couldn't help but make a comment.

"Gee wiz, buddy. What kind of hunter comes into the woods without a knife?" My words hung in the stillness for a moment as he gathered his thoughts. I regretted saying it almost immediately, but that little twinge of envy was still gnawing at me.

"I left it back in my truck," he said. "I really didn't expect to see anything, let alone get one. It's back in the laurel." As he motioned in the general direction of the laurel behind him, I noticed something I hadn't noticed before—instead of a hand pointing to the laurel, there was a hook. A pang of guilt came over me.

"Okay, buddy, I'll help you out. Let's go." We made our way through the thick leafy cover to the deer.

It was a large deer, with a fine high rack. The little man stood over it, beaming with pride. He neither moved nor spoke. He just stared at his prize for a few minutes. I let him savor the moment.

He pulled the buck around and looked at where his first bullet hit. I glanced passed him and noticed he was carrying an old lever action 30-30 with iron sights, a good gun for this thick stuff. I reached into my carrying case, pulled out my knife and stepped forward, preparing to field-dress the deer. But the little man wouldn't hear of it. He asked for my knife and proved to me he was no more handicapped than I. He quickly moved across his deer, skillfully using my knife in his good hand and holding the hide with his hook. In a matter of minutes the deer was clean and the little man was wiping off my knife in the snow and leaves.

We made small talk for a few minutes,



IT WAS in that thick laurel, just off the ridge, some 20 years ago, that I bagged my largest buck ever, a beautiful 10-point. The mounted rack still graces the hideaway room in my garage.

and I listened as he related to me how he bagged his trophy. After a few minutes we both realized he had forgotten to tag the deer. I helped him take off his license holder and fill out the tag, and then watched as he placed it on the buck's ear.

I was anxious to return to the hunt, so I offered to help him drag the deer to the trail on the ridge. He accepted and muttered something about leaving his rope in the truck as well. Much to my surprise, he undid his belt and wrapped the thin leather strap around the front hooves. He then looped it around the deer's neck. With his hook holding up his pants, and me holding the antlers, we quickly hauled the deer to the top of the ridge. The snow made for an easy drag, and I knew he would have no problem by himself once he reached the trail.

### Something Special

He mentioned to me on our way up that his truck was parked on a camp road I was quite familiar with. I pointed out the way, and estimated his drag to be about a mile or so, most of it downhill. He thanked me and turned to go. But before he went, he turned back and said something special, something that will come to mind whenever I think about my 1987 hunt. With the biggest grin I had ever seen, and with honest sincerity, the little man said, "Good luck, buddy, and I really mean that." I have to admit, I felt pretty good at that moment and realized that in that short amount of time I had made a friend. I nodded and then headed in the opposite direction, convinced that luck was not with me this season. It didn't matter, though. It had been a very satisfying morning.

I made my way across the plateau at the top of the ridge and turned towards the laurel where my son had bagged his buck. I glanced back a couple of times



to watch my newfound friend slide his buck down the trail, in the direction I had pointed out.

I found a nice stand at the edge of some laurel that gave me a good view to several intersecting trails at the edge of the thicket. I stood motionless for a time, getting accustomed to my new surroundings. Suddenly, a doe poked her head out of the laurel. Surveying the area, she seemed unaware of my presence and proceeded to walk slowly down one of the trails.

I continued to concentrate on the area she had come from and, sure enough, within seconds, a spike walked out. I dropped him with one shot. I couldn't believe it. Less than 20 minutes after parting company with the little man with a big grin, I had my buck.

It wasn't a 7-point, but it was a nice size deer. I quickly tagged it, field-dressed it and made my way back to the truck.

While sipping on some hot coffee in the truck, I reminisced over the morning's events. One buck, one friend and one great feeling. Not a bad score.

I also thought about his parting words, "Good luck, buddy, and I really mean that." I'm sure he really did.

# Three for Three

By Gregory D. Levensgood

I APPROACHED my stand cautiously, trying to make as little noise as possible and yet get there and settled quickly. At 6:15 a hint of daylight shined in the eastern sky. Many times it's still too dark to see deer when legal shooting time arrives, but I knew I'd be able to shoot by the 6:44 start today. The light coating of snow helped make the woods a little brighter.

I was hunting with my brother Rob and our father, out of our camp in the northcentral part of the state. We've been hunting the same general area since 1973 and have been fairly successful there.

I spent the first half hour on stand like I do on every season opener, reflecting on the anxious anticipation and thorough preparation that leads up to buck season. In many years buck season seems to arrive before I'm physically and mentally ready, but this year was different. By the end of October my 7 x 57 Ruger 77 was putting the 145-grain Speer Spitzers right where I want them—two inches high at 100 yards. That left me all of November to practice my offhand shooting, giving me the confidence it takes to make that all important shot when—and if—the opportunity ever arises. I can't really say, however, that I mind spending a few leisurely evenings with fellow shooters, punching holes in paper targets.

As daylight penetrated the frozen woodland my thoughts turned to all my friends and the million other hunters across the state who were experiencing the same great feelings I was. The opening day of buck season is my favorite day of the year. Because of the nearly perfect conditions, I expected a volley of gunfire echoing through the mountains to announce the beginning of shooting time, but 7 o'clock came and went quietly.

About 15 minutes later I saw my first

deer. I heard them first and then saw them about 250 yards away, well within range of Dad. I had just begun to check them with my binoculars when a single shot rang out. I was sure the shot came from Dad's direction, and about 15 minutes later my suspicions were confirmed when I heard, "I got him." I waited about 20 minutes, just in case any deer in the herd came my way, and then went to help Dad.

I met him on his way out. He was dragging a nice 5-point. It was about average for a mountain deer, weighing—we found out later—115 pounds field-dressed. He dropped it at about 150 yards, putting the 150-grain Speer from his 308 right through the deer's ribs.

Having a buck hanging from the meat pole had us all feeling good. Going one for three had us above average, we figured. After getting things settled at camp, we decided Rob and I would go back on stand and that Dad would make short drives for us. One-man drives aren't necessarily the best, but one person can move deer around, and it also gave Dad something to do.

After the early morning action things were pretty quiet. It wasn't until around 11 o'clock when three deer came trotting up the middle of the ravine. The first two were definitely does, but the last one looked to have short spikes, but less than the three-inch minimum. A short time later two does came within 30 yards of my stand, and after a while a large doe fed up through the ravine. Although I couldn't find any legal heads I was seeing deer and that's the reason we hunt the "Big Woods" counties. There are many places in the state that have bigger deer but few places where we can hunt large tracts of forest and see as many deer in a day as here. In this mountainous region, shooting a nice forkhorn is as noteworthy as shooting an 8-point in the farmlands.





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Furthermore, we all enjoy our time together at camp. Many friends have asked me why we head north the day after Thanksgiving when the season doesn't open until Monday, but getting the camp ready, scouting, visiting with other hunters, and all the other related chores are as much a part of deer hunting as the actual hunt.

The day was growing pleasantly warm, with bright sunshine falling on me and melting the thin snow cover. At times like this it's easy to be overcome with drowsiness and doze off, and if I hadn't been deer hunting, that's probably what I would have done. As nice as it was sitting, though, I started to get itchy around 12:30. I fought off the urge to move, however, and decided to stay put until 1:30 to take advantage of hunters moving around during lunch. Then I would break up the monotony by stillhunting up around the rim of the ravine and back to my stand to finish out the day. I would prefer to stay on stand the entire opening day because of the large number of hunters in the woods, but sometimes it gets the best of me and I've got to take a walk.

Around 1:00 a herd of deer came up and across the ravine about 200 yards

away. They were feeding through some heavy cover, but I found an opening where I could check their heads. I immediately spotted horns. They were moving away from me, so I quickly dropped down prone in the snow and used a little hump in front of me as a rest. It was a long shot, and I wanted to get the steadiest rest possible. The buck didn't cooperate, though. He either kept moving in and out among the does or else was shielded by cover. After a few moments they disappeared in the brush. As I waited for them to reappear I decided that since the deer were feeding away from me there was a good chance they would continue on their path and I would never see them again. After a few minutes I decided I would have nothing to lose by trying to stalk them. As I got up and started in their direction they suddenly appeared. They were moving back down through the ravine. I dropped back down to my shooting position and found an opening ahead of the moving herd. The deer were moving at a hurried walk, and at that distance there wasn't much time to check their heads as they passed through the opening. The first two were does; the third was the buck. By the time I confirmed the antlers and got the crosshairs on the vitals, I was aiming at its back ribs. I quickly pulled the trigger. I thought I saw the deer go down when the rest of the herd scattered. I reloaded and saw the buck trying to regain its feet so I fired again. Then all was quiet.

The antlers were smaller than I thought they would be, only three points, but I felt great. My first shot hit farther back than I like, but it was high enough to break the spine, dropping it instantly. I paced off the distance at 145 steps, about 150 yards, so I can't complain about not making a perfect shot on a moving deer at that distance.

I MET DAD on his way out. He was dragging a nice 5-point. It was about average for a mountain deer, we found out later—115 pounds field-dressed. He dropped it at about 150 yards.





Dad got there just after I had the deer dressed, and we dragged it out and had it hung up by 3:00. I had heard some shooting from the area Rob sat while I was dressing my deer, so Dad and I were really hoping he had connected to make it a perfect 3 for 3 day. We headed toward his stand, at the same time putting on a small drive for him. Unfortunately, the shots I had heard weren't Rob's. He had seen about ten deer but none with legal headgear. He decided to stillhunt up over the hill, and I picked him up at dark on the other side. It almost paid off, too, as he saw a spike up close, but he couldn't stretch them to three inches. We ended the first day a deer short of a perfect score, but successful days are measured by more than just the number of deer taken.

We made our usual rounds of other camps that night to see how other hunters had fared and, as expected, the kill seemed to be rather high. Most camps had at least one buck hanging and many had more. We didn't see any trophy bucks; the majority seemed to be spikes and Y-bucks.

Dad and I had the luxury of sleeping in a bit the next morning, but Rob was up by 4:30. He decided to stand in an area overlooking some large oaks with patches of grapevines. Dad and I planned to make a short drive through the area about 8:30. The weather conditions were horrible as a freezing rain had started about daybreak. We barely made it to the area Rob was hunting because of the treacherous roads. Our short drive was unproductive, and Dad decided to call it quits because he had a cold. The bad weather with cold soaking rain wasn't going to help his condition any.

Rob spent the rest of the day in the area where Dad and I had scored the day before. Even with me playing dog for him he saw only one deer all day. I

told Rob he was successful just by the fact that he stuck it out all day. I'm sure most hunters didn't.

Dad left for home on Wednesday morning because of his cold. So, after loading his gear and the bucks in his truck, he dropped me off at Straight Ridge, where Rob was hunting. I met Rob at a predetermined time and he told me he wanted to get out of the area because there were just too many hunters. We spent the afternoon and all day Thursday stillhunting through some more remote terrain, but we didn't see any bucks.

### Another Drive

On Friday Rob was out on stand before light, as he had been every morning so far, and I was going to make another early morning drive. Most days we stand until 9:00 to take advantage of early morning deer movement and hunter activities. We also feel stillhunting becomes more practical later in the day, when rising temperatures make walking quietly more practical.

When I left camp at 8:00 I knew it would be a good day. The skies were overcast, snow was predicted for later in the day, and the wind was calm. It was the type of day that deer would be feeding heavily because of the upcoming



AS I ROUNDED the bend I saw Rob sitting on a stump, with a 5-point laying in front of him. At that moment I was as happy as if I had shot the deer myself. He had hunted hard all week under some very tough conditions.

storm. I even found eight deer feeding in the field across from camp. I moved four doe and a flock of turkeys by Rob but nothing with a rack.

Needing a change of scenery, we decided to spend the rest of the day in an area we had never hunted before. The spot looked good on the topographic map for stillhunting, which is the type of hunting we enjoy above all others. Many times it isn't feasible until later in the week, however, when the woods are free of hunters.

### Points and Hollows

Rob hunted the right side of the ridge, exploring all its points and hollows, while I took the left side, armed with only a pair of binoculars. To me, deer hunting is the same whether I'm carrying a gun, camera, or just binoculars and field guides.

About 3:45, as I was returning from a walk to the far point of the ridge, a single shot rang out on one of the points near Rob. I was almost certain it was Rob, but I tried not to get my hopes up too high

because I know how shots always turn out to be someone elses.

I continued along the ridge toward the Scout, my pace a little quickened in anticipation of the good news. As I approached the road, I thought I saw Rob and my spirits dropped. But as I got closer I realized it wasn't Rob but another hunter, and at that moment I just knew Rob had a deer. I talked with the stranger a few minutes and then drove down the road to pick up Rob where he said he would come out. As I rounded the bend I saw him sitting on a stump, with a 5-point laying in front of him. At that moment I was as happy as if I had shot the deer myself. He had hunted hard all week, under some very tough conditions. At times it would have been very easy to roll over when the alarm went off, or come in because it was raining, or give up because of crunchy snow. But when you have only one week out of the entire year to partake of your favorite pastime, you have to grab every minute that you can because it's a long wait until next season.

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RINGO WANTED to go, so I turned him loose. I felt certain we were close to Big Foot. Ringo started to trail and bark and headed south. Soon I faintly heard Ringo on top of the mountain, coming towards me.

## New Sport for Houndsmen . . .

# *Mystery of Shade Mountain Big Foot*

By Donald L. Guyer

**I** FIRST noticed them in January, 1985, while fox hunting on Shade Mountain. They looked like fox tracks except they were much too large.

I told my hunting buddies about this, and some of them said they were from a stray dog. John Maneval, Mt. Pleasant Mills, and Urie Peachey, McAlisterville, each said it was a fox with oversize feet and then laughed.

I decided to nickname the track "Big Foot."

In February, 1986, I was driving a mountain road along Shade Mountain, after a fresh snow, and found where Big

Foot had crossed. I had a young foxhound called Judy along, so I put her on the track. Judy took off trailing and barking, and I thought, well, it's no stray dog. Judy headed west in the flat of the mountain for approximately half a mile, then paused a little and headed north, running hotter than before. I hurried out to see what happened. As she was only 14 months old, I thought she might have broke off on deer. But when I got there I found where a red fox had crossed Big Foot's trail. Judy took off after the fox. That was the end of the chase for Big Foot that day.

I didn't see Big Foot's track again until January, 1988. In the meantime, however, I was talking to Robert Brandt, McAlisterville, who's a member of the Lost Creek Deer Hunting Camp. He told me of seeing a strange gray animal during one of their deer drives. I said, "That must be Big Foot." I told my hunting buddies I had found where Big Foot was, and that I was going after him. Most of them laughed, and some made sly remarks about being extra busy these days, and that they didn't have time to come along.

### Snowed About Six Inches

Then, on January 28, it snowed about six inches. So, on Saturday, I asked Dale Fosselman, Cocolamus, my hired man, to go along after Big Foot. He probably agreed out of fear I would fire him.

We loaded my registered Walker foxhound Ringo. He is a big, 26-inch hound, and I thought he would be the best for running in deep snow. Once there we walked up a gap in the front mountain, heading for the back mountain, where the gray animal was seen by the deer hunters. We walked to a path along the back mountain, but didn't find his track. I decided to send Dale east on the path while I headed west. Finally, after I walked about a half mile, checking deer and fox tracks in the snow, a different track appeared. The animal had come down on the path and headed west. The more I looked at the tracks the more excited I got, and Ringo was

straining on the leash, smelling the trail. I was sure I had found Big Foot again.

Big Foot walked the path almost a mile, making steps 18 or 20 inches apart, in a nice straight line. Each track was almost as big around as Ringo's. Then he jumped off the path, and started making leaps like a running deer, down the mountain towards a ravine that had thick high laurel. Ringo wanted to go, so I turned him loose. I felt certain we were close to Big Foot. Ringo started to trail and bark and headed south. As he faded away, he was swinging towards the northeast. Soon, I faintly heard Ringo on top of the mountain, coming west towards me. As he got closer and his voice clearer I could tell he was driving hard. Finally, we had Big Foot on the run! Then, all at once, a gray animal came loping into sight, in clear view. My heart was pounding. I knew it was no stray dog or a fox with oversize feet. It was Big Foot the coyote!

When he got almost broadside of me I fired my 12-gauge loaded with Magnum No 2s. The mystery of Big Foot was over.

Since then I have run several other Big Foots, and have heard from deer hunters of more sightings in central Pennsylvania.

By the way, now I have no trouble getting my hunting buddies to go along after Big Foots.

Also, Ringo took a liking to them too, as he seems to drive them harder than a fox.



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# How to Grow a Conservationist

By Carl G. Keller



**R**EMEMBER when you were a kid? Can you still remember how fascinated you were with the outdoors, how excited and carefree you felt when mom let you play in the woods or wade in the creek? I bet those same feelings still rumble inside of you, even after all these years, every time you shoulder a gun or cast a fishing line.

But you've probably developed some other feelings about the outdoors, too. Over the years you have come to realize that a wise hunter or fisherman is also



an avid conservationist. You now see nature as more than a place to play. You recognize it as a fragile system that has to be protected and nurtured today if you want to enjoy it tomorrow.

Such a sense of stewardship comes from deep within. You don't need a law to tell you it's wrong to throw cans in your favorite fishing hole or to leave candy wrappers by your deer stand. Somehow, you just know better.

But, you have a problem. Your kids are growing and they're starting to ask tough-to-answer questions. They don't understand why you tell them to pick up tangled fishing line somebody else discarded. Nor do they understand why you get so angry when you hear of a person who shot three deer on the same day and gave two of them to his non-hunting buddies.

You're finding it's not easy to put your deepest feelings into words. And, too often, the only wisdom you can offer your kids in answer to their questions is, "Well . . . because good people just don't do things like that." It isn't hard to figure out, however, that giving them the same answer to every question won't hold their attention for long.

Now, you're stuck. Like most sportsmen with children, you are wondering how you're ever going to pass your deep love of nature to your children when you can't even put it into words. It's a prob-

lem that haunts every truly concerned conservationist as he watches his children mature.

Don't worry; even if you could put your feelings into words, you still couldn't make your kids believe them! Think about it. You didn't learn your feelings from someone else. You discovered them all by yourself. You may have known people who served as examples, but you came to your own conclusions about the world around you.

Your problem isn't getting your kids to know how you feel. They'll figure that out, even if you can't find just the right words to express yourself. Your challenge is to guide your children to discover, for themselves, the same love of the outdoors you found.

One thing's for sure, however; you won't pass on your beliefs and feelings about nature by "preaching the gospel" of conservationism every time you get your kids to sit still. If you're going to guide them to see the light, you'll have to be sneaky about it.

### Knowledge

The first step in helping someone develop a lifelong love for the outdoors is to instill in him the value of knowledge and the habit of searching for it.

The melancholy cry of an unseen loon on a twilight lake, for example, is just noise to the passerby who has never contemplated the life of a loon. But, to the observer who has read about loons or seen pictures of them bemoaning the passing light, the soulful slur carries a million times more meaning.

How do you get a young person to see that knowing about nature can make it more enjoyable? A good way is to make sure you never give him any knowledge unless he wants it—badly! Don't lecture him, or cram books and magazines down his throat. That will only turn him off.

Simply supply him with plenty of outdoor experiences. Then, when he starts asking the questions that will naturally grow out of his adventures, go find a book and look up the answers together. It won't take him long to figure out that





you believe knowing about nature makes it more exciting for you. And he will see that you think knowledge is worth hunting.

Also, by handling things that way, you will avoid two potential pitfalls. The first is that your children will grow to depend on you to do their thinking for them. Showing your child how to find information on his own will go a long way toward preventing that.

The second danger is that (perish the thought) your answers might be wrong. If you have ever played “whisper-down-the-alley,” you know how distorted things can get as they’re passed from one person to another. It could well be that some of what you have learned from others about the workings of nature has been distorted in the same way. What better way to tell your child that it is okay to seek the truth than to do it together.

### **Appreciation**

As their fire for knowing leads them to a closer examination of the world around them, your children will begin to comprehend the vast complexity of nature. They will become fascinated with the intricate artwork that is life.

Knowledge leads to appreciation, and a deep appreciation will lead to a desire to learn even more. The process becomes the best type of “vicious circle.” As knowledge and field experience build, one upon the other, each excursion afield will provide living proof of things already discovered. And even the shortest walk will bring forth new questions to be answered.

As your growing outdoorsmen discover the answers to question after question, they will start to recognize that all living things are interrelated. Without being lectured to death, they will begin to comprehend complex concepts such as predator-prey relationships, food chains and parasitism.

After they have stumbled on the extremely delicate “nature” of nature, your son or daughter will develop a deep love for wild things. The awe that you sense when you look upon the living menag-

erie will be in their hearts, too. And, they will be ready for the last leap in logic on the path to conservationism.

### **Conservationism**

After you have “tricked” your young people into appreciating the marvelous things nature has supplied, it’s too late to change your mind about what you’ve started. At that point the fact that your kids will be conservationists is already a foregone conclusion.

The more your offspring appreciate what nature offers, the more they will become aware of what it means to have it taken away. They’ll understand why you feel so strongly about littering. And they will look in disgust at the greedy attitude that allows a person to poach as much game as he can.

In short, one day they, too, will sense a feeling of stewardship that comes from within. And, just like your deepest feelings about nature, their ideas will be rooted in the age-old progression of knowledge, which leads to appreciation, that becomes a heart-felt need to conserve what one has.

### **The magic ingredient**

If there is a magic ingredient in the process of growing a conservationist, it’s simply this—enthusiasm. Teach your kids, by your own excitement, that there is no better reason for unleashed enthusiasm than the love of nature’s spectacles.

Don’t send your kids a double message. Don’t tell them it’s okay to be turned on about the outdoors and then get embarrassed when somebody makes fun of you for showing your love of nature. Be proud. You cannot expect your kids to feel it’s all right to show enthusiasm if you are afraid to show it yourself.

By exposing your soul to your kids through enthusiasm, showing them the enjoyment to be had by gaining knowledge, and supplying them with experiences that will foster appreciation, you will accomplish what you most hope to do: grow a dyed-in-the-wool conservationist (just like you)!



1918 is when the hunting above connected with this woman. Name: Frank Mitchell was 18 when he dropped the Somerset County trophy using a 30-30 gauge.

# DAYS OF YORE



CHARLES E. SULLIVAN and Glenn S. McELVIN, below, took these two bruins from Bald Eagle Mountain, Lycoming County, in 1953. Left, Mr. Ling and Calvin Stitt had a good day in 1915 "hunting" groundhogs.







ED "TODD" FRANK, and JOHN "HAP" MEYERS used motorcycles with sidecars to trap along the Allegheny River in the 1920s—and they obviously did quite well.



DORA MILLER, above. Laystown, girl is listing in more than 30 consecutive years. This one in 1911. Members of the Black Spring Gun Club, below, pose with six ducks, the "come home" in 1937.

HARRIS, FORREST and PERRY KINLEY, left, pose with one day's harvest taken around Puriland Mills in 1911. Members of the Wolfe family, below, took this fork horn in Northumberland County



BERT and ERNIE HANKS, below, at the Everett Rod and Gun Club on Martin Hill in southern Bedford County in the late 1920s. Right, photograph by Emil Gregory at the turn of the century. Note breech loading hammer gun, appears to be a 10-gauge.







## FIELD NOTES



### Out of Place

**TRAINING SCHOOL**—I spent a lot of time around Pymatuning last fall, thanks to Crawford County WCO Dave Myers and LMO Keith Harbaugh, and I was truly amazed at the area's abundance and diversity of wildlife. But even I was skeptical when a hunter reported seeing a crane near one of the duck blinds. I figured he had just mistakenly identified a great blue heron, which are common there. But Dave said, "Anything's possible at Pymatuning," and, sure enough, several days later Wildlife Technician Chuck Thoma positively identified the bird as a sandhill crane. —Trainee Jerry A. Bish.



### Multiple Catches

**CAMERON COUNTY**—A few years ago I wrote a Field Note about a lady from Emporium who borrowed a box trap and caught three skunks at one time. This year's prize for efficiency goes to Deputies Ben Krieg and Howard Stuart and Wildlife Technician Rawley Cogan who borrowed my bear trap and promptly caught two bears at the same time. Anybody want to borrow my fishing pole? —WCO Joe Carlos, Driftwood.

### Important Program

Last fall I had the distinct pleasure of showing Dr. Margret Brittingham, Assistant Professor of Wildlife Resources at Penn State, and graduate student Christine Holmquist the locations where we have our streamside fencing projects established. They were selecting study areas Ms Holmquist will use to evaluate this worthwhile conservation practice. —LMO Barry K. Ray, Sr., Rockwood.

### Been Around and Knows

**TRAINING SCHOOL**—Before being accepted to the training school I spent 11 years in the Air Force. During that time I traveled throughout the United States and Europe, and was able to hunt in many areas. But in all my travels I never saw any place that can match Pennsylvania's abundance and diversity of wildlife. Please, help me protect our bountiful resource. —Trainee Stephen S. Hower.

### Experienced

One day last fall my Food and Cover crew and I had an opportunity to work with Lynn Whetstone and Brad Gable, two of the agency's surveyors. When one of them asked me if I had any SPORT bags, I gladly gave them the last four I had, thinking they were going to use them as litter bags while they worked along the Game Lands boundary. After they had the bags securely in their possession, however, they explained that they were going to put the bags over their boots, to keep their feet dry, when we came to a wide creek we had to cross that day. Needless to say, I felt as if I had been left holding the bag that day, but I ended up with wet feet, too. —LMO Barry Zaffuto, Ebensburg.



## Second Thoughts

**TRAINING SCHOOL**—Ever see a whitetail buck take on a herd of Holstein cows? I have. While I was on field assignment with Lancaster County WCO Ted Fox we noticed a herd of Holsteins running through a pasture, really kicking up their heels. They apparently were disturbed by a deer that had wandered into their pasture. When first observed, the buck was standing in the middle of the field, tongue hanging out, sides heaving and head drooping. When the cows resumed their chase, it was apparent the deer needed some help. The deer was forced across a creek and through a swamp, and even swam a pond before we were able to guide it to safety. I'm sure it will be a while before that whitetail takes on those big, black and white creatures again.—Trainee L. Spotts.

## Stay at Home

**ELK COUNTY**—Throughout the summer I kept my eye on deer in my back yard and on the adjacent State Game Lands. Two were bucks which I planned on hunting during the archery season. As the season approached, however, I began to look for greener pastures elsewhere. As you might have guessed, early in the season a deputy drove by my home and saw a buck feeding in my lawn, and late in the season I found four hunters in my yard, tracking a deer one of them had shot on the Game Lands. As for me and my greener pastures, I never got a shot.—WCO Dick Bodenhorn, Ridgway.

## Spice Rack

**WASHINGTON COUNTY**—Hunter-trapper education coordinator John Duskey has found a new use for his bluebird box. John likes to eat vegetables right from the garden, but he got tired of running back to the kitchen for the salt shaker. After the bluebirds finished using the box overlooking his garden, John kept a salt shaker in it.—WCO R. Matthew Hough, Washington.



## Fast Learner

My neighbor, Bob Byers, has a lane about a half mile long up to his dairy farm. One evening his brother Tom was spotlighting deer along the lane when he saw a small buck. The deer began running across a pasture, but when it tried to jump a fence, its antlers got caught in the wire and it did a complete somersault. Bob saw the deer several times afterward and marveled at how it crossed the fence. Bob says the deer would make a couple false starts, take a running leap and clear the fence by about six feet, run a few yards, and then stop and look back at the fence as if to make sure he had cleared it.—LMO Jim Bowers, Knox.

## Got It Wrong

**ADAMS COUNTY**—While most beavers are content to slow the flow of streams, I had one industrious critter stop the flow of traffic on Route 30. He did so by felling two trees across the highway, striking one car and causing two others to collide. I guess the busy traffic was disturbing his sleep.—Mike Dubaich, Aspers.

## Keep It Up

Don't forget: If you've been feeding birds this winter, don't stop until fair weather arrives and natural foods become available. Birds become dependent on us, so don't let them down.—LMO Jerry Becker, DuBois.



### Yea, But . . .

**VENANGO COUNTY**—Deer excite people, hunters and nonhunters. I recently heard of a lady who was putting out her dog when she saw four deer run through her yard. Being deer season, she immediately called her husband. When he asked her if any were bucks she replied, "I think so. One had a white tail."—WCO Leonard Hribar, Seneca.

### Surprise

**TRAINING SCHOOL**—It was Thanksgiving Day, and WCO Steve Kleiner and I were writing up an individual for driving on a Game Lands when we heard another vehicle coming. Steve and I hid in the brush and then jumped out as two ATVs came by. After a short chase, the two drivers were apprehended. Upon questioning, the two admitted knowing it was against the law to drive on the Game Lands, but because it was Thanksgiving, they figured all officers would be home having dinner with their families.—Trainee Larry M. Smith.

### Almost Heaven

**TRAINING SCHOOL**—After my three-week field assignment in Potter County with WCO Dick Curfman—and his wife's cooking—I know why the area is called "God's Country."—Trainee Douglas C. Carney.

### Six More Hours

**TRAINING SCHOOL**—Upon reporting to McKean County WCO Jim Rankin I was immediately informed that my first assignment was to address the 4th, 5th and 6th grade students at the Port Allegany Elementary School. I was further informed that my presentation was to last an hour. As this was to be my public speaking debut, I had no idea how much material I'd need. Some 15 pages of notes later, I thought I had enough. What I never imagined, however, was the enthusiasm and knowledge the students had. At some point—while I was on my second page of notes—I asked the group if they had any questions. Nearly everybody raised his hand. Needless to say, the hour passed quickly, and I was left with over 13 pages of unused notes. To Matt Wilson, the students and administrators of the school, thanks, and keep up the good work.—Trainee Keith A. Falasco.



### Popular Scent

**SOMERSET COUNTY**—With time for many of our jobs so limited, especially on afternoon shift, I started preparing sites for my furbearer survey on one day and planned on finishing them the next. When I returned the next day I found a red fox had already visited my first three sites, probably looking for the scent he loves so much, but gets a whiff of only once a year.—WCO Daniel W. Jenkins, Somerset.



## Knew Who to See

**LYCOMING COUNTY**—Like many people, Safety Zone Cooperator Bill Harvey enjoys feeding hummingbirds. Last summer he had quite a few visiting his feeder. The birds also would often perch on the nearby hanging flower baskets, but they always flew away at the first sign of a person. One day, however, Bill was out on his porch, and a bird landed on the top of a magazine he was reading. Bill slowly lifted his head, to get the bird in bifocal range, and noticed something odd. The bird's upper bill was bent around and protruded well into its mouth. Slowly and gently, Bill got a hold of the bird and then straightened out its long, needle-like bill. That done, he released the bird, and it flew happily away. — WCO Dan Marks, Williamsport.

## Bear Bait?

One of the ways Warren County WCO Bill Schultz relaxes is by cooking, and he's no slouch in the kitchen. Bill entered his famous cinnamon rolls in last year's county fair, and won not only that class, but also the "Best of Show" in the Yeast Division. Since then Bill has gotten a lot of requests for his rolls, and now I know where to stop for a snack. — IES Bob MacWilliams, Sandy Lake.

## Eye in the Sky

**TRAINING SCHOOL**—I was on field assignment in Bedford County when I had a chance to do some flying with WCO Dave Koppenhaver. Aside from our law enforcement work, on one flight we went bobcat hunting. Wildlife Biologist Jack Giles and his crew have nine bobcats equipped with radio transmitters in the area, and to locate them they often must spend days or weeks traveling in cars and on foot. From the air, however, it took us only two hours to locate all of them. This is just one of many examples of how modern technology is being used for wildlife management. — Trainee Joseph V. Stefko, Jr.



## Off Key

**ELK COUNTY**—People come from hundreds of miles away during September and October to see the local elk herd. And every year there's a few who try to call in a bull elk by using bugles. In the fall up here a person can hear more weird notes than in a beginner's music class. — WCO H.D. Harshbarger, Kersey.

## Do Your Part

**TRAINING SCHOOL**—Three times while on field assignment I assisted with small mammal complaints. In each instance a family pet had come in contact with a rabid animal. Even though the rabies epidemic seems to be waning, the threat still exists. Pet owners, please take proper precautions, as required by law, to safeguard your family and pets. The first line of defense against this disease starts at home. — Trainee Michael G. Ondik.

## Natural Diet

**McKEAN COUNTY**—A Smethport resident was feeding squirrels last summer, and by September he had 25 bushytails coming to his feeders. But as soon as the cherries, beechnuts, acorns and other natural mast crops started to fall, the squirrels disappeared, apparently preferring the wild foods over corn. — WCO John P. Dzemyan, Smethport.

## Progress

In the 23 years I've been in Armstrong County I've seen the turkey population grow from just a few stocked birds to the point where it now seems there's a healthy flock on every wooded hilltop.—LMO R.H. Muir, Kittanning.

## Nice Going, Matt!

Shortly after the opening hour of buck season, 12-year-old Matt Baker, New Enterprise, dropped a nice four-point. That's quite a feat for any new hunter, but it was an especially nice accomplishment for Matt because his mobility is greatly restricted by muscular dystrophy. Thanks to his father, though, who constructed a frame on which Matt could rest his gun, toted two bales of straw up the mountain to sit on, and then transported Matt up the mountain on a four-wheeler, Matt was able to experience all the joys of hunting.—LMO Steve Schweitzer, New Enterprise.



## Just Feeding the Pony?

**BEDFORD COUNTY**—I've heard all sorts of excuses for violating game laws, but the person apprehended on stand with corn and apples all around him takes the prize. He argued that he was merely feeding his neighbor's pony, but neither I nor the judge bought it. Maybe if he could have explained why he was wearing camouflage clothing and carrying a 30-06 . . .—WCO Tim Flanigan, Bedford.

## Experienced

**ADAMS COUNTY**—While investigating a violation I asked a suspect for his hunting license and then proceeded to explain his legal rights and the procedures we follow, hoping they would be understood. Then I removed his license from its holder and out fell a "Miranda Warning" card. That person sure was prepared. He not only knew his rights, he had a reminder with him. For some reason I think he had been through the process before.—WCO Larry Haynes, Gettysburg.

## Tall One

**CLEARFIELD COUNTY**—I was recently issued a full-size GMC vehicle, and with the red light mounted on the roof, it's exceptionally high. Later, LMO Quig Stump and I were patrolling SGL 100 when we came to a tree leaning across the road. When I told Quig I didn't have an ax or saw along, he promptly got out and lifted the tree high enough for me to pass under. Motto: Always patrol with someone who is at least six feet five inches.—WCO Donald L. Zimmerman, Drifting.

## Busy Schedules

**CAMBRIA COUNTY**—The engine in my state vehicle is always racing, from the moment I start it and even when stopped at a red light. My mechanic thinks it's a problem with the fuel injection, but I think it's my vehicle's way of telling me to get moving, that there isn't enough time in the day.—WCO Lawrence A. Olsavsky, Colver.

## Blockade

**WESTMORELAND COUNTY**—The improvements to several major highways here have made them safer for motorists, but not for wildlife. The newly installed concrete dividers seem to have caused an increase in the number of roadkilled animals, probably because they trap the animals in the middle of the highway, keeping them from freely crossing back and forth like they could with the old style dividers.—WCO Dennis L. Neideigh, Greensburg.





**THE GAME COMMISSION and WESTERN PENNSYLVANIA AUDUBON SOCIETY received a first place "Take Pride in Pennsylvania" award for their wildlife recovery efforts during the January 1988 oil spill in the Monongahela River. Pictured are DER Secretary Art Davis, Southwest Region I & E Supervisor Barry Moore and Director Don Madl, and Governor Robert P. Casey.**

## Commission Receives Three Major Awards

**By Ted Godshall**

**PGC Information Specialist**

**T**HE Pennsylvania Game Commission has won first and second place honors in the "Take Pride in Pennsylvania" campaign, and has been named recipient of the 1988 Boone and Crockett Club Award.

The Boone and Crockett Club Award is given annually by the International Association of Fish and Wildlife Agencies to recognize the state or province which the IAFWA selection committee nominates as having the most outstanding hunter ethics promotion for that year. Pennsylvania was cited for our SPORT program, first adopted under the administration of former executive director Glenn L. Bowers. During the organization's annual fall conference in Toronto, Bowers, now general counsel to the IAFWA, was recognized as

SPORT'S "prime mover." In making the award, IAFWA officials noted:

"SPORT stands for 'Sportsmen Policing Our Ranks Together,' and since its inception in 1976, the program has had far-reaching results. Every first-time hunter in Pennsylvania, some 50,000 annually, is exposed to the SPORT concept in the mandatory hunter-trapper education program required prior to a first-time license purchase. SPORT is also credited with successful prosecution of numerous Game and Wildlife Code violators, and has been a model for other state programs which encourage sound outdoor ethics.

"Each year, the Game Commis-

sion's field officers work diligently promoting SPORT to the public; thus maintaining and improving the image of sport hunting; and thereby improving public acceptance and understanding of the importance of outdoor ethics by all those afield at various seasons of the year.

### *From the Press:*

"The Boone and Crockett Club is proud to sponsor this important award recognizing achievement in one of the most crucial areas facing sportsmen today—ethics afield and the public perception of sportsmen in general. We extend hearty congratulations to the Pennsylvania Game Commission, its current Executive Director Peter S. Duncan, and to former Executive Director Glenn Bowers for a job well done."

More recently, the Game Commission and Audubon Society of Western Pennsylvania were recognized as first place winners in the Department of Environmental Resources's "Take Pride in Pennsylvania" program. The Commission was cited by Governor Casey and DER Secretary Art Davis in connection with what they termed "an extraordinary wildlife recovery effort during a major oil spill on the Monongahela and Ohio Rivers back in January." The nomination states:

"As a million gallons of diesel fuel traveled down the rivers into Ohio, the drinking supplies of hundreds of thousands who drew water from the rivers were contaminated.

"Almost overlooked at first, except by wildlife conservation officers of the Pennsylvania Game Commission, was the disaster occurring in wildlife populations. Conservative estimates of first day mortality of wintering waterfowl placed the loss at nearly 2000 birds.

"As the tragedy on the rivers be-

came apparent, the Southwest Regional Office committed its total resources to the rescue of waterfowl dying a lingering death of exposure during one of the most severe cold spells in recent history. The oil robbed the birds of their natural insulating ability, and they were slowly freezing to death. Crews were dispatched to scour the rivers to recover affected birds and remove them to a cleaning station set up at the Brady's Run Public Works Building in Beaver County. Commission officers braved the severe conditions on the river as wind chills of 30 to 40 below hampered their work.

"The cleaning station was staffed by the Game Commission, Audubon Society of Western Pennsylvania, and Tri-State Bird Rescue experts from neighboring Delaware. The station was manned, for the most part, by volunteers from as far away as Michigan.

"The recovery cannot be measured in the total numbers of birds saved, but by the dedication of Game Commission personnel and volunteers—and the environmental consciousness raised by worldwide media coverage of the deep concern the people of western Pennsylvania hold for the wildlife of the Commonwealth."

As a state first place winner in the "Take Pride in Pennsylvania" contest, the wildlife recovery effort has been submitted to compete for national "Take Pride in America" honors.

The Commission was also recognized as a second place winner in the state competition for its Deputy Wildlife Conservation Officer program. The Commission's nationally recognized and widely acclaimed deputy force is comprised of 985 dedicated individuals who annually volunteer their time and talents to assist in law enforcement, wildlife management, and information and education programs throughout the commonwealth.



# 1989 Middle Creek Wildlife Lectures

**A** GAIN THIS year the Pennsylvania Game Commission is offering a series of wildlife lectures at the Middle Creek Wildlife Management Area Visitors Center near Kleinfeltersville, on the border of Lancaster and Lebanon Counties. These will be one to 1½-hour programs with appropriate visual aids, followed by question-answer periods. There is no admittance charge. Each lecture will begin at 7:30 p.m., on the following dates, with subjects and speakers listed below:

April 5, 6—*North American Wild Turkey*, Gerald Wunz, Game Commission Wildlife Biologist; April 19, 20—*Bears of North America*, Gary Alt, Game Commission Wildlife Biologist; May 3, 4—*Woodworking for Wildlife*, Jerry Hasinger, Game Commission Wildlife Biologist; May 17, 18—*Wild Flowers in Pennsylvania*, Tim Flanigan, Game Commission Wildlife Conservation Officer; June 7, 8—*Pennsylvania's Wildlife and Wild Lands*, Hal Korber, Game Commission Photographer/Videographer; June 21, 22—*Pennsylvania's En-*

*dangered Reptiles, Amphibians and Fishes*, Clark Shiffer, Fish Commission Herpetology & Endangered Species Coordinator; July 5, 6—*Edible Wild Plants*, Kermit Henning, Educator and Outdoor Writer; July 19, 20—*Angling Opportunities on the Susquehanna River*, John Plowman, Game Commission Information Specialist; August 2, 3—*Waterfowl Identification and Conservation*, Dick Brame, Executive Director, Pennsylvania Federation of Sportsmen's Clubs; August 16, 17—*Hunters from the Sky*, Jack Hubley, Producer/Host of WGAL TV's "Call of the Outdoors;" September 6, 7—*White-tailed Deer Hunting Strategies*, Kelly Cooper, manufacturer of Kelly Kallers; September 20, 21—*Outdoor Survival Skills*, Carl Graybill, Game Commission Bureau of Information and Education; October 4, 5—*Whitetail Country*, Mike Ondik, Conservationist/Lecturer; October 18 (one night only)—*Venison Field Care and Processing*, Mike Schmit, Game Commission Information and Education Supervisor.

**WCO EDWARD R. GDOSKY**, Luzerne County, received the Shikar Safari Club International's "Conservation Officer of the Year Award." Presenting the award is **S. Soski Piroeff**. A 32-year veteran wildlife conservation officer, Gdosky has consistently ranked among the top officers in Game and Wildlife Code enforcement.





**BRENDA McCAFFREY PEEBLES** became interested in bald eagles when she discovered a pair was nesting within sight of her Crawford County home. Since then she's turned that interest into a labor of love by monitoring all known eagle nests in the Northwest Region.

## **The Eagle Lady of Crawford County . . .**

# **Brenda McCaffrey Peebles**

**By Chuck Thoma**

**PGC Wildlife Technician**

**L**ITTLE DID Dave and Brenda Peebles know that when they moved into their new home above Geneva Marsh that they'd be sharing the neighborhood with a pair of nesting bald eagles. While their house was being built, in 1979, Dave noticed large raptors winging by on a regular basis. He had no idea, however, that their aerie was little more than a good tee shot to the south of his front yard, in a large white pine.

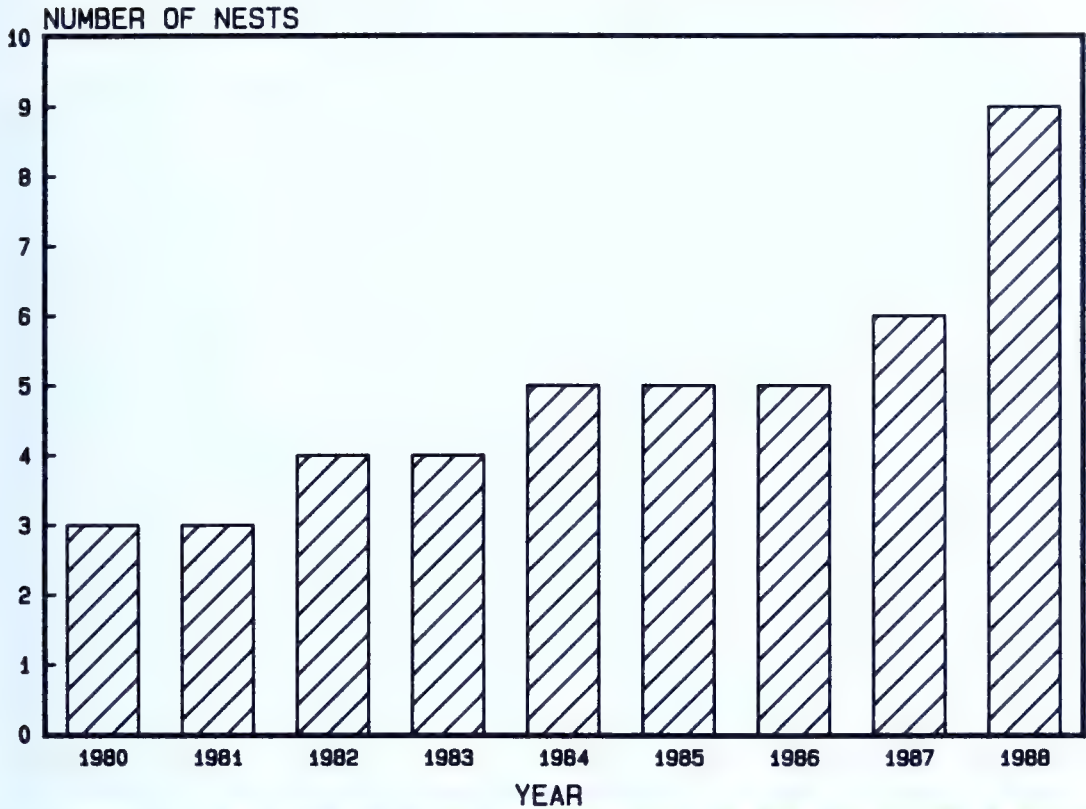
Eventually, Brenda also began noticing something. A couple times a week a district wildlife conservation officer would stop at the bottom of the driveway and scrutinize the distant evergreens through his spotting scope.

Brenda's curiosity finally compelled her to find out what was attracting so much attention. When told that a pair of bald eagles had setup housekeeping across the road she was surprised. How could birds so large go so unnoticed so close to home? Yet there it was, a large mass of tightly woven sticks, complete with eagle, high in the branches of an old white pine.

The integrity of what's referred to as the Johnson Road aerie became Brenda's ambition. It was to be a labor of love which included reminding anxious birders, some of whom had driven 100 or more miles to view the eagles, to maintain a safe distance from the nest because their seemingly harmless intru-



# EAGLE NESTS IN PENNSYLVANIA



THE NUMBER of eagle nests has steadily increased during the '80s. Furthermore, an active nest found last year along Pine Creek, Tioga County, represents the first confirmed eagle nest in eastern Pennsylvania since at least the 1950s. Below, Brenda and the author review notes at a nest site.

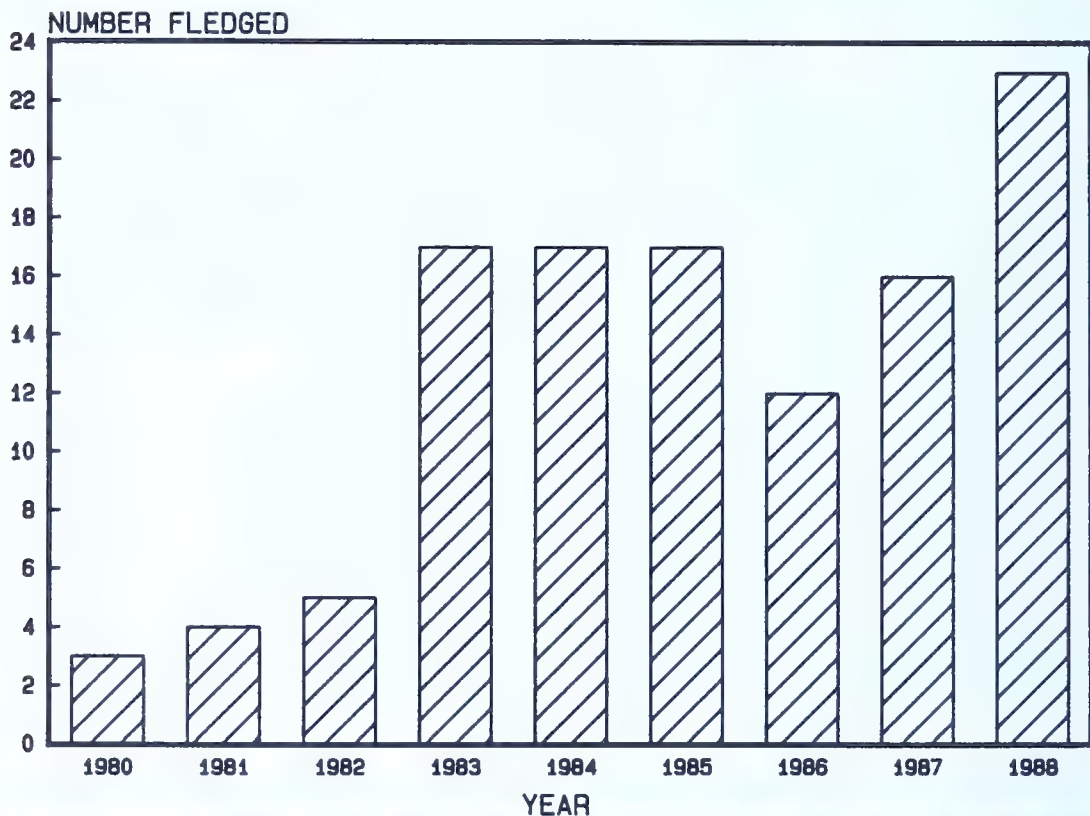
sions may ultimately force the shy birds to abandon the site.

Her steadfast efforts to monitor and preserve the sanctity of the Johnson Road aerie did not go unnoticed. In 1982 the Game Commission presented Brenda with the agency's "Certificate of Appreciation" for her tireless dedication.

That was merely the beginning, however. Over the next four years she maintained her protective vigilance over the neighboring nest site. Then, in 1987, Bureau of Land Management Director Jake Sitlinger recognized the need to monitor all the active eagle nests in Crawford County. His goal of having a seasonally employed watchguard in the field during the critical nesting period would not only keep officials updated on the progress of the endangered raptors, but also free the WCOs to pursue their many other duties. The job would involve traveling to the known eagle



# EAGLES FLEDGED IN PENNSYLVANIA



THE NUMBER of bald eagles fledged in Pennsylvania has also increased dramatically during this decade. The eagle production indicated above includes foster chicks (we normally receive one a year) and, since 1983, the 12 to 14 eaglets obtained from Saskatchewan and banded here.

nests, taking accurate field notes, and sending bimonthly reports to the regional office in Franklin. Noted violations such as unlawful human encroachment and poaching could be relayed directly to local WCOs Dave Myers and Bob Criswell.

Once the part-time position was approved there still was the matter of locating the best candidate. One familiar with bald eagle nesting behavior was preferred. Brenda had little competition for the job. She had spent the previous six years monitoring the aerie on Johnson Road, and the challenge of documenting the progress of the other active sites was just too good to be true.

Early in 1987 Brenda entered the field as a professional. Armed with a spotting scope, note pad and a heightened curiosity born in all naturalists, she travels from one nest site to the next, recording all relevant data from the beginning of the eagle's 35-day incubation period through its 12-week fledgling stage.

Yes, the Eagle Lady is good at what she does, and with the continued support of Pennsylvania sportsmen and the Game Commission's aggressive restoration program, our nation's symbol will likely become an ever increasing spectacle over the waterways of the Keystone State.



# Lock, Stock & Barrel

ONE MORNING, not too long ago, I pulled out of the driveway and saw a sign. It was along the road, directly across from our property, and it read, "Land For Sale, Contact \_\_\_\_\_ Realty." I went back inside and told my husband, who said, "Buy it for us." Which is the reason I am now the owner of a little woods.

Added to the 1½ acres that came with the house, the forested 6⅔ acres of hillside we just purchased now give us a full eight acres, plus ".02," according to the surveyor. This bit of land must seem laughable to landowners who have hundreds of acres to consider, but for two people who grew up on suburban postage-stamp lots, it's more than we ever thought we'd have. We're discovering land is not mere boundary lines on a map.

Like the majority of property owners in the state, my reasons for acquiring wooded land were varied. Principal was the fact that I didn't want to look out my window one day and see something other than trees, like a building or a stripped hillside. In buying the land, I got so caught up in the purchase negotiations and seeing the sale through the legalities of financing and closing, that I didn't realize what would come after. Now that everything is signed and paid for, and the deed says this forest plot is mine, what do I do with it?

The property may be small, but I'm finding my use options are the same as those who own large tracts of land. On a miniscule scale, I've got the same problems, joys and opportunities. I have the choice to steward the land, conserve it and improve it, for myself and the wild things that live on it, or abuse it. I'm finding that responsibility a little awesome.

One option, of course, is to leave the land as it is. It's a nice forest now. But I'm enough of a home gardener and landscaper, and I've talked with just enough forester acquaintances to know that doing nothing is not the best an-

swer. Like my yard and garden plants, managing my woods patch wisely will increase my yield, in a number of ways. I'm considering some cutting, some trimming, and some planting that should make "Aunt Linda's Woods" better for the many purposes I'm finding for it.

Wildlife, for instance. After the fact of just being able to look at "my" forestland, taking pleasure in the way it changes through the seasons, there is a concern of making the land more hospitable to wildlife. There are squirrels in my woods now, songbirds, a grouse that drums, and a deer trail. In considering what to do for the wildlife on the property, I plan to preserve the few dogwood and wild apples, and trim away competing weedy trees. I want to encourage a brushy edge to stay that way, and keep the grapevine tangle. There are oaks, hickories and maples, but no evergreens. Planting several clumps of pine or hemlock, for winter cover, is one improvement idea. I'll leave the standing dead trees for the woodpeckers, and intend to put up some squirrel and bird nesting boxes.

Because I heat my home with wood, I can reduce my winter fuel costs by taking some of what I need from my own land. But I realize that what I saw down I must balance against its value to other needs, such as aesthetics and wildlife. I know I can certainly take the smaller trees, those that would be shaded out anyway, for kindling. I may also select some of the maples and a few of the

Another  
View...

by Linda Steiner



**WILDLIFE, fuelwood, recreation, timber production and aesthetics must each be incorporated into a management scheme for the land, something I can stay with.**

lesser oaks that are losing the competition for light and space. They will make firewood, while their removal will leave more room for the better trees to grow.

Soon after I bought the property, a friend who was connected to the timber business visited me. When I showed him my mini-forest, he said, "If you wanted to cut all the marketable timber off it, you could pay for the land right now." I didn't want to, because the trees were why I bought the parcel. He did make me think when he added, "In ten or 15 years, a lot of these oaks will be prime, veneer grade." Selling them then would be a nice nest egg for retirement, if the price of timber stays high. At that point, the woods will probably need some opening up, allowing sunlight to

reach the forest floor, to be beneficial to wildlife. I can always use the cut tree-tops for firewood. In the meantime, I can include management for these big trees in my overall plan.

One of my first thoughts about the land was to have a winding nature trail on it. There's a surprising amount to see, even in a 6 $\frac{2}{3}$ -acre forest. A cleared path will make it much easier for Aunt Linda to take her little nieces for their favorite woods walk (and get them good and grubby for mom). The same trail, my husband informs me, will be his roving archery range. He wants to set up moveable hay bale backstops over the uneven terrain so he can shoot at unmarked distances, practice for bow season. Recreation on the land I own, although limited, must be considered with my other uses of wildlife habitat improvement, fuelwood, and timber.

I'm not quite ready to go at anything in my little woods with a chainsaw, or get out the shovel. It takes a long time to grow a tree, so I want to consider the consequences of each change I make. I want to develop a management scheme for the land, something I can stay with. One thing I am sure of now is that it's different walking through a forest that you own, rather than one that belongs to the public or to someone else. There, you have nothing to do with it, no sense of responsibility for what it is or what it can become. But here, I feel the new, but not unwelcome, weight of ownership that comes with having title to even a little wild land.

### Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral Region, 1-800-422-7551; Southcentral Region, 1-800-422-7554; Northeast Region, 1-800-228-0789, and Southeast Region, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.





# Outdoor Wildlife Learning

By Bill Einsig

## Collect Them

**W**HEN you're learning about the natural world there is no substitute for having the real thing close at hand. Direct observation of actual specimens is far better than secondhand descriptions or pictures in books. Of course, it's not always possible to have exactly what you need when you need it.

That's why collections of dried and pressed plants are so useful to anyone teaching or learning about the natural world. Such a collection, called a herbarium, is easy to construct, store and maintain. It can very quickly provide a realistic sampling of the plant community in your area.

As a teacher, I like to think of a school herbarium as a learning tool, contributed by classes of students who collect and donate specimens of their own. The best student work becomes a part of the school's collection, while my own damaged specimens are replaced by new student contributions. The goal of building an outstanding school collection brings a new perspective to traditional leaf collection assignments where little use is made of student work after grades are assigned.

The most useful collections are built around basic principles and standardized procedures that simplify the whole process. Here are a few ideas to consider before you begin your own herbarium.

1. Think plants; not leaves. A good herbarium is a collection of plants, not just leaves from trees. Ideally, each specimen should include roots, stems, flowers and fruits as well as leaves. Even with tree species, leaves should be attached to a

twig section in order to show leaf arrangement and twig characteristics such as lenticels, bark color and leaf scars. Fruits often require special drying and storing techniques but make the collection even more useful.

2. Don't limit your herbarium to just trees. Shrubs and herbaceous plants are just as valuable as learning tools. Whole specimens of dandelions, plantain and crabgrass, for example, will help students learn to recognize these common species more rapidly and to appreciate their impact on our world.

Teachers often set rigid requirements for student collections. Perhaps specimens must represent a set number of plant families or be limited to only native trees. Some teachers do not accept ornamental varieties and others accept only deciduous hardwoods. I suspect many of these limitations are carry-overs from the collections the teachers had to complete in college, or they may reflect the teacher's lack of confidence in recognizing less familiar non-tree species.

I'd like to see a variety of collections built around varied themes such as backyard weeds, wild edibles, garden edibles and fruiting vines. Some students could concentrate on pines, maples or oaks, while others collect only shrubs. Setting strict limitations reduces the rich variety of experiences possible for young collectors.

3. Proper handling as well as prompt pressing and drying of collected specimens can be important. Freshly collected

plants produce better dried specimens than do wilted ones. Use a plastic bag to store and transport the plants until they can be put into the plant press.

4. Some authorities recommend using lightweight field presses and heavier drying presses. They may be good for formal collections but are impractical for most high school assignments. I like strong presses made of half-inch plywood cut to 12 by 18 inches. The common lattice-type presses are not as strong and too frequently break with heavy student use.

Plant specimens should be placed into folded sheets of newspaper (about 16 by 23 inches) then sandwiched between sheets of absorbent blotter paper (driers). Corrugated cardboard ventilators then separate these blotter sandwiches and provide a drying flow of air. The sequence from the bottom of the press goes like this: plywood, cardboard, drier, specimen in newspaper, drier, cardboard, drier, and so on. Two dozen or more specimens can be stacked in this manner before the plywood is added and the whole unit strapped tightly together.

I can still picture my vivacious botany professor standing precariously atop her plant press on the front table of the college lecture hall while she tied the ropes around the press. While I can't match her style, I understand that plant presses need to be TIGHT! Strong belts are a must to keep the plants flat and prevent curling as they dry.

5. Standardizing the size of specimen folders, driers, press frames and mounting paper simplifies the entire process. Handling of specimens in the drying process and storage of completed specimens are much easier when they are all the same size.

6. Some suppliers sell lightweight cardboard as mounting paper. However, you may be able to find a heavy paper or poster board locally that you can easily cut to standard size (about 12 by 16 inches). Don't worry about using "official" mounting paper, especially if you can obtain suitable materials elsewhere that match your budget and do the jobs you want.

If student collections are to become part of the school herbarium, the mounting paper should be provided to students so completed specimens are uniform.

7. There are three basic ways to attach the dried and pressed specimen to the mounting paper—gluing, taping and tying. Gluing is normally fine for light specimens, while tying may be necessary for larger, woody pieces. Taping provides more security for glued specimens and sometimes is used alone. Gluing is the most common method but has the disadvantage of hiding the back side of the specimen from further study.

The classic method for applying glue to the plant is to brush glue onto a glass sheet and then laying the specimen into that glue film before transferring it to the mounting paper. Another method is to gently brush glue directly onto the specimen. Some student collections I've seen had merely a pool of glue smeared in the center of the mounting paper and the plant laid on that glue. That's a bit messy.

Tying the plant to the mounting paper is the most secure mounting technique and also provides the potential of removing the specimen, if necessary, to examine the other side. A needle and strong thread are passed over the specimen, through the paper and then knotted snugly on the back side. Cloth tape on the back of the paper will help prevent the thread from tearing out.

8. A label should be attached in the lower right-hand corner of the mounted specimen. It should include both scientific and common names, the plant family, and information on where, when, and by whom the plant was collected. Usually, a reference number is also used to key the plant to your specific collection.

This information should be written down as soon as the plant is collected and kept with the plant during the drying process. A final label can be added after the plant is mounted.

9. Specialized herbarium cabinets are convenient but expensive. In most cases, cardboard boxes, and lots of moth crystals, will keep your collection in working order.

Making a plant collection is nothing new. Generations of students have made, and discarded, collections almost as a rite of passage through school. Ironically, most of those schools don't have teaching collections themselves. That's a shame because good student work should be shared with other students.



**I**T WAS one of those early March days with the thermometer frozen in the teens. I left my Scout parked on Maple Hill, near the town of Arnot, Tioga County, and started up the trail leading to the Dikes Run beaver dams. We were having a late winter, and I had about a mile and a half to travel, through a foot or so of snow, before I reached the first series of dams. I followed the well-packed trail of trappers who were working the area. Little did I know I was hiking to my annual destiny which occurs each beaver season.

When I reached the dams I followed the trapper's tracks from set to set around a series of small ponds. I paid particular attention as they wondered across the main dam structure and around each beaver lodge. Even during the coldest winter days the ice remains thin where the beaver go in and out of their huts, and at the points where they cross over the dam to go down stream during their nightly roving. I have found traps placed right on the dams at these crossing points, and sometimes even at the entrances to their lodges. That's an effective trapping technique. But it's illegal and not very sporting. In 1975 it was illegal to set a trap within 25 feet of a beaver's house or dam. In recent years that distance has been reduced to 15 feet, to make trapping in smaller dams more practical.

After I checked the main dam I crossed the ice by one of the down stream buffer dams. These ponds were small, but fairly deep, as they were constructed where the stream cuts through a narrows before plunging down the hollow on its way to Babb's Creek. I wasn't worried because we hadn't had a thaw yet, and the ice seemed quite thick. But suddenly, as I neared the shore, there was a crack and a scream as ice water penetrated my clothes. I was in almost to my armpits. Gasping from shock, I grabbed a nearby tree and hauled myself clear of the water. I started to continue my rounds, thinking of possible violations, but after only a few steps, my clothes were freezing solid. At that point I began to think about the mile and a half trip back to the Scout. When I reached the trail I began to jog, both to hasten the trip and to keep my blood circulating.

By the time I reached the Scout I was shivering violently and recognized the first stages of hypothermia. My numb, shaking fingers had a hard time with the keys and lock, but finally I was inside.



**By Jack Weaver**

Wildlife Conservation Officer  
Centre County

There I had a change of clothes and a thermos of coffee. I got the engine started and considered just taking off for home, but by then I was shaking uncontrollably from head to foot. I could see in the mirror that my lips were blue. I was afraid I wouldn't make it. It was cold outside, but I forced myself to strip out of my wet clothing and hurriedly put on dry clothes. All the while I kept sipping hot coffee as fast as I could. By the time I was dressed the heater began spitting out warm air. I was still trembling a half hour later as I pulled into my driveway and headed for a warm—not hot—shower. But I had survived another of my annual beaver season swims.

An interesting one occurred a couple of years earlier, when my neighboring officer Bob Sinsabaugh and I were patrolling some dams near Hills Creek. These dams, fortunately, lay right along the road. The trapper was already there checking his sets as we pulled up. I recognized him as a notorious violator that I had arrested before. He had been found guilty at a hearing, but failed to pay the fine. A warrant for his arrest was issued by the magistrate. When Dave Brown and I found him in a local diner he ran out the back door. He then proceeded to lead us on an interesting chase through a snow storm and over some nasty roads before we managed to catch him. As a result he went to

jail for a few days. So, there was no love lost between us.

Well, this time he had a trap set pretty close to the beaver lodge. At least it looked close to me. I pulled a measuring tape out of the big pocket of my uniform coat and asked Bob to hold it over the set. Bob didn't think that was such a good idea. He knew the ice would be thin around the beaver's house and told me so. Besides, he thought the distance looked close enough. But I was young and hard-headed. I grabbed the end of the tape and stomped off toward the beaver's lodge, skirting some open water around the feed bed. I didn't make it. Just short of the hut a new section of open water suddenly developed. I was bobbing in the middle of it. Fortunately, the trapper didn't laugh—at least not out loud. Anyway, it's hard to get hot under the collar when submerged in ice water. I managed to squirm out onto firmer ice and measured the distance between the trap and the house. It was 25

feet to the inch. Bob was smiling a big "I told you so" all the way back to our car. I was shivering too much to comment.

The most dangerous of my flirtations with the Polar Bear Club occurred in March of 1978. It was the last day of beaver trapping season. A spring thaw was in full swing, and it was a warm sunny day. In fact, it was so warm that I was patrolling in shirt sleeves. I was concentrating on a particular individual who allegedly had set more than his legal quota of ten traps. I knew where ten of his traps were, but had been unsuccessful in locating the extra ones. I was concentrating, perhaps, too much on finding traps when I should have been paying closer attention to the ice.

A deputy and I were in the town of Arnot, which is a little old mining town surrounded entirely by State Forest Lands. This particular beaver pond was located right on the edge of town. There are several more beaver colonies right in

## Fun Games

### "WHO'S THAT HONKING?"

By Connie Mertz

Among the most familiar migratory birds seen flying over Pennsylvania are Canada geese. Four of the statements below are false. Can you find and correct them?

1. Canada geese fly in "vee" formations.
2. Adult male geese are called honkers.
3. Canada geese are very intelligent birds.
4. Canada geese can fly up to 60 miles an hour.
5. The gander also sits on the eggs during incubation.
6. Canada geese are abundant and popular game birds.
7. Young geese are called ducklings.
8. Adult geese never lose their flight feathers.
9. Canada geese are among the first waterfowl to breed come spring.
10. Canada geese can migrate day or night.

List the numbers of the incorrect statements below. Then on the spaces provided, correct them.

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Answers on page 64



the middle of the town as well. It was, and still is, a unique place.

This pond was simply called number 5 by the local people, because its water originated right out of the old number 5 deep mine shaft of the old Arnot Coal Company. The water had a high sulfur content, which never makes for ideal ice conditions. And at every time of year the water was a dark murky chocolate, with a putrid odor to boot. It was also reported to be very deep. As I stood along the shore, looking out over the semi-frozen pond, I sighted the telltale signs of a beaver set right in the middle. Old tracks in the slush, which covered the ice, led out to the set. I could see the ice was what we call "sick ice." It was a sickly brown color from already melting back into the depths from which it was formed.

But my mind was on the set in the middle. Who would still be tending a set out there? Could it belong to the man I was after? I had to know. The ice on the pond was actually floating free from the shore. I had to step across about six inches of open water to get onto the ice flow—another bad sign. As I stepped onto the soft mushy ice I told the deputy who was with me to stay put no matter what happened. Then I began to make my way out to the set. I noticed the whole ice flow was honeycombed. I was walking on rotten ice, and I began to feel queasy. I moved slowly on toward the set, stepping as softly as I could, and listening for the slightest cracking sound. But my efforts were in vain—only healthy ice cracks. It happened when I was close to the set, without the slightest warning. One second I was walking on top, the next second I was underneath. My deputy told me later that what disturbed him was that I just

disappeared before his eyes. Well, if that disturbed him, it didn't disturb me. Down on the bottom of the pond, I didn't have time to ponder the situation. I just remember plunging straight down into the gloomy depths. When my feet hit the muddy bottom I felt my knees flex, and I instinctively pushed off. You may call it what you will, but I call it a miracle of God's grace that I shot straight up through the hole I had just fallen through. Rotten or not, that ice was still about eight inches thick, and if I had missed that hole I never would have found it in time through that murky mess.

When I came up I flung my arms out and somehow managed to kick my way out. Rolling away from the hole, I got to my shaking feet and hurried toward shore. I remember thinking how glad I was that I didn't have my hip boots on because they probably would have held me down. Later that night I awoke in a cold sweat. I had dreamed I was still under the ice and couldn't find the hole.

The hazards of our job are real and varied. Like the time I was walking along a rock escarpment and found a porcupine den. Leaning close to the rock face I peered inside, then straightened up only to find myself eyeball to eyeball with a coiled rattlesnake only inches from my face. Stepping back quickly, I spotted another one coiled only inches from my right foot. Neither one bothered to rattle. What kept the one from striking me in the face, especially when we almost rubbed noses, I'll never know. I had nightmares for years over that one. I suppose when I get to heaven my guardian angel is going to grab me and take me out behind the wood shed for a good thrashing. Well, I guess I'll have it coming. See you next month.

## **WOODWORKING for WILDLIFE: Homes for Birds and Mammals**

The Pennsylvania Wild Resource Conservation Fund (income tax checkoff fund) and the Game Commission have produced a 60-page booklet full of detailed plans and related information for people interested in building and erecting wildlife nesting devices. From bluebirds, screech owls and ospreys to raccoons, squirrels and even turtles, easy to follow directions for building 22 proven homes and other devices for wildlife are provided. Order *Woodworking for Wildlife* from the Game Commission, Department AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Price is \$3 each, delivered.



IT'S THE rare year in which I find time to enjoy all the various rites of spring; yet I try, and the rites I do observe never fail to bring satisfaction.

Saw my first woodcock on the seventh of March. My spaniel, Jenny, flushed the bird, then looked at me quizzically—wondering, I suppose, why I hadn't shot. I watched the woodcock elevate through the leafless saplings (it looked a lot like the last bird I bagged in November, far on the other side of the year), then level off and fly down the hollow. Its presence told me it was time to go watch what Aldo Leopold in *A Sand County Almanac* so aptly termed "the sky dance."

For me, it is a major rite of spring. My wife and I stow a groundcloth and a blanket in the pack basket, and head for a low, soggy tract with clumps of alder and aspen and twisted, deer-browsed, seedling pine. We choose a windless, cloudless evening, and arrive before sunset. We spread the groundcloth in a likely spot, sit, drape the blanket over our shoulders, and wait.

Blackbirds fly over, pepper grains in the deep blue sky. A robin lands in a tree, scolds us, flits away. The contrails of jet airliners turn a livid pink, and sometimes the planes themselves can be glimpsed, tiny silver sparks against the darkening dome.

*Peent.*

Suddenly we are all ears.

*Peent.*

The sound—buzzing, penetrating, hard-to-locate, as ludicrous as the flight song will be lovely—never fails to make us grin.

*Peent.*

Where? Over by that willow? In the flat there.

"He's up," my wife whispers, and the woodcock sweeps over our heads. A black silhouette: his bill looks long as knitting needles, his wings blur and whistle, his tail is a stub.

Up he flies, scaling the sky in great sweeping circles, until, near the top of his ascent, we lose him in the fading light. We sit still, holding our breath, straining, listening.

The song is a string of chirps, liquid and plaintive. Down he comes in tightening circles, singing for all he's worth; singing for a mate. A strange bird, whom Jenny and I pursued last fall: eater of worms; small, russet, mystical migrant.

He sweeps past us, flares his wings, lands.

*Peent.*

He'll go on like this for an hour, longer if the moon is full. And again at dawn. Sunrise, sunset: ancient, miraculous rites.

Another rite of spring is performed by the frogs. It is no good trying to listen to woodcock while trying to listen to frogs (and they are often neighbors), as the frogs will drown the woodcock out. Last year it was the beginning of the last week in March when the frogs started in at Oak Pond.

First the wood frogs: like rocks struck together, like round stream cobbles clacking.

A day or two later, the spring peepers: a high, piercing pinging that sounds like sleighbells.

At the same time as the peepers, begin the chorus frogs: thumbnails preeped across combs.

In another week, on a misty, rainy night, the high, persistent trilling of the toads.

Like the woodcock's singing, these amphibian calls are invitations to mate. I'll take the flashlight to show my way, go sit on an old log, listen. My head fills



with sound, sound that I suspect is more ancient than the woodcock's song, equally miraculous, telling of new life rising from fecund earth.

The plants start getting into the act about now, the crab apples pushing their small saw-toothed leaves, the aspens hanging out catkins, and the pussy willows displaying their familiar furry flowers. The red maples—so bright and showy last October—set out thousands of bright red flowers.

Things are greening underfoot. Notable is the dandelion. (The *dent-de-lion*: the lion's tooth, from its sharply indented leaves.) I'm not an avid connoisseur of dandelions, and I suppose this particular rite of spring is a negotiable one for me, because it's been a couple of years since I made a meal of spring greens.

Best place to find dandelions is on old, tired land. Pastures, fields, log landings, creek bottoms. Dandelions picked early, before they flower, will not be chokingly bitter. They should be cut barely below the top of the root, at a point just below ground level. The older, tougher outer leaves are discarded, like the waste on a head of lettuce.

Pick loads of the plants, as they cook down wonderfully. Wash them two or three times to get rid of grit, put them in a kettle, and pour boiling water over

them. Let them simmer for five or ten minutes, drain, and season with butter and salt or a crumbled-bacon dressing. Dandelion greens are rich in Vitamin A and are said to "thin the blood" after the exigencies of winter; in any case, they taste pretty good (with plenty of dressing) and provide an ironclad excuse to be out and about in the spring.

While foraging for dandelions or being serenaded by frogs or creeping up on woodcock, it usually happens that I hear a grouse drumming. Which precipitates another rite of spring: trying to catch the bird in the act, to sneak up on him and watch him engaging in his own eager vernal rite.

### Just Once

I believe I was successful in this just once. (The drumming male grouse, exposed by his position and by his loud display, inclines to be jittery and will run off or flush at the slightest provocation.)

First, I got a bead on the source of the sound by walking around at some distance listening; then I moved in, in a deep crouch, often on hands and knees, removing twigs that might snap, easing past the clattery laurel leaves. Fortunately a light breeze covered up the few sounds I made. It took me an excruciatingly long time to cover the 100 yards, and my pains still might have been for





naught except for the fact that the grouse, astride his drumming log, was facing in the opposite direction.

He was drumming up a storm. Coming at him from behind, I was able to see how he braced himself on the log with his fanned chestnut-color tail. He must have been holding on for dear life with his feet, because his wings flapped heroically, the first whacks visibly separate—*thud—thud—thud*—then blurring as he carried the drumroll to its end—*thud—thud—thudthudthudthudthudthud—udududududud*. (Or something like that; just as it's a difficult sound to pinpoint from afar, it's a difficult sound to describe.)

In earliest March—sometimes in late February—we hear geese and swans flying over in the night. The calling of the swans is the more mellifluous sound: high and haunting, a lofty tremolo composed of dozens of voices. Then the geese, pitched lower, harsher, like dogs barking; approaching, crossing above us (right above *us*, right over our *house*), gaining the mountain, receding, leaving nothing but the silent night. Sometimes as they fly over, the calls subside and we have a period of silence, broken finally

by one voice: *ha-runk, ha-runk*, the second syllable higher than the first, and then the flock joins in and starts talking again, talking about spring, talking about heading north.

In March, we go check on the lake. More times than not we draw a blank: a lead in the ice, a couple of lonesome mallards, nothing more. It inconveniences the birds, but I always hope for a storm; an ice storm, or a night of wind and pelting rain, to force the travelers down onto our local waters. If the weather is foul enough, and if my timing is right, they'll be there in number: geese and swans, oldsquaws, buffleheads, hooded mergansers with their white crested heads, baldpates and gadwalls, teal, occasionally a pair of loons, all sorts of fowl dressed to the nines in breeding plumage, dazzling against the dull water and the winter-drab shore. The thought that they are going on, farther and farther north, to wild, empty lands, raw and elemental lands, fills me with awe.

An almost mandatory rite of spring is the long walk; to "get the stink blown off," as they say. Out of the house, out of the towns, out of the well-tilled valleys, and into some tight mountain hollow where half the sky and all the traffic sounds are fenced out.

Raise a grouse to two, maybe see some deer, their coats patchy, starting to shed. Buds swelling, and the rust-red candles on the tips of the pine boughs straining to get going, get growing in the strengthening sun. A turkey gobbles, a nuthatch *wer-wers*, a chickadee gives its machine-chitter call. Woodpeckers drum on hollow trees, a raven dawdles across the sky. The rush of water over rock, for the stream is flowing full.

We won't see another soul, Jenny and I. We'll watch the year beginning, another winter leaving, another spring bursting forth.





**BECAUSE** arrows kill by hemorrhage, not by shock as bullets do, it's most important to keep broadheads sharp. The DMT Diamond Broadhead sharpener, above, is one of many sharpening tools available. It will duplicate factory angles on two, three and—as shown—four-blade broadheads.

Honing up . . .

## ***The Cutting Edge***

**By Keith C. Schuyler**

**E**XCEPT possibly for someone new on the bowhunting scene, it is common knowledge that an arrow normally kills big game animals by hemorrhage, the heavy and fast loss of blood. To a lesser extent, that can also be true of a bullet, but they normally kill by shock. There are times when an arrow will drop an animal in its tracks, when it causes damage to the nervous system, as in a spinal shot.

However, from a humane as well as a practical sense, when it comes to dispatching a big game animal, those who use each missile in season, should not overlap their thinking. A high-powered bullet has the potential of combining

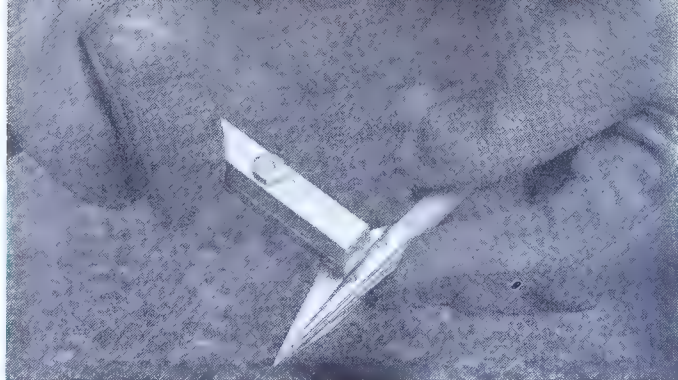
shock with the destruction of bone and tissue to cause instant death. A properly placed arrow must sever or slice one or more large blood sources or vessels to effect quick demise. Each is an acceptable method of downing game.

### **Ideally**

It should be recognized, nevertheless, that what's accepted as a satisfactory hit from a bullet doesn't necessarily qualify as such when made by an arrow. Ideally, both should be aimed in the heart area, where even an imperfect hit is still likely to produce the desired effect.

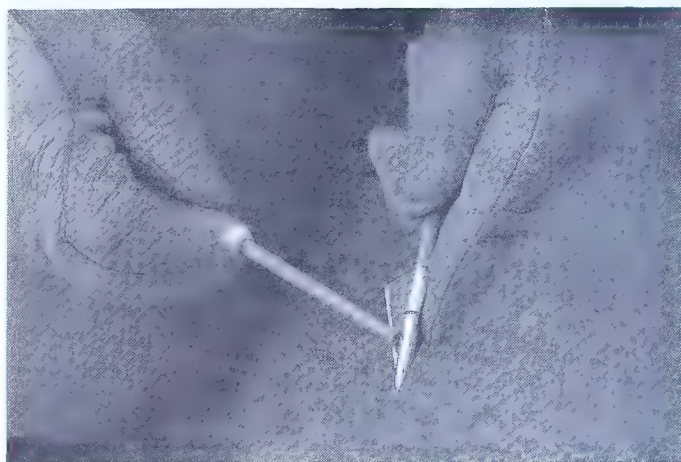
This is as far as I will venture for the

SCHUYLER carries an old Lansky hone in the field for touching up broadheads that end up on the "far side of the target."



A FINE-GROOVED file provides an easy way to dress two-blade broadheads, but finishing touches with a hone will smooth out the cutting edges.

DIAMOND-STUDDED sharpening rod is another useful tool for field use. NOTE the protective gloves for all sharpening chores.



THE LANSKY knife sharpener set includes a clamp for firmly holding blades. Although designed primarily for sharpening knives, this device will hold and sharpen any style of broadhead.



sake of comparison into the province of Don Lewis's "The Shooter's Corner." There is much to consider about the archer's responsibility beyond the necessity to make a good hit.

The often repeated necessity to practice with the bow and arrows intended for hunting can be negated if we don't keep hunting broadheads sharp. A good hit on game can still fail to produce the desired result if the head doesn't cut, but just slides by the tough veins and arteries. They must be tough, or neither we nor the animals we seek would live long enough to cross trails.

Among all the broadheads available, none is satisfactory unless it is sharp. At one time, not so many years ago, two-blade heads were most common. Many were of inferior metal that would sharpen easily, but they lost their edge almost as fast. Today there is a wide choice of heads, most of them acceptable in design and hardness. Yet, although the blades may appear sharp after a trip into the dirt on a miss, I make it a point to put mine in a bow quiver slot where they can't be inadvertently removed until they are resharpened.

It is true that some of the better heads have almost razor-sharp edges. The harder the metal, the more likely that it will chip rather than become dull. But even a razor can become dull.

The need for a broadhead to penetrate deeply, to do as much damage as possible, is a further consideration. The blades must first go through hair, hide, flesh and frequently, ribs, before reaching the vital areas.

Reputed claims of some heads to penetrate hard bone do not impress me. Except for those archers who can efficiently handle extremely heavy bows, bone hits are more likely to turn a minor injury into a crippling one. There is often the need, of course, to penetrate



THE WHITE-TAILED DEER is the symbol species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patchwork the snowy egret, bluebird, bobcat, woodcock and elk are still available; those of the deer prey and river otter are sold with stickers (\$1 each) are available for all but the patch and deer. Order from the Game Commission, Department AR, 2001 Elmwood Ave., Harrisburg, PA 17110-9797.

through the rib cavity. Rib bones are relatively soft, but the broadhead must be able to penetrate through or slip between ribs and still be effective. That's one reason many modern heads have a wedge-shaped point that will do just that.

When it comes to sharpening heads, there are a number of approaches. While it is true that badly dulled or chipped heads should be replaced, there are tools today that can return a satisfactory edge to routinely dull blades with minimum effort.

### SHARPENING HEADS

Sharpening sessions, however, are best held in the home or in camp. Probably more injuries to archers occur when sharpening arrow heads than at any other time. While usually minor, a nasty cut on a finger of the string hand can put an archer out of business for a while at worst, or hamper his shooting at best. Consequently, care is needed at all times while handling broadheads.

In the days of the old back and belt



quivers, arrows were more or less jammed into the receptacle. There, where blades rubbed against one another, their edges became dull even before they were removed for shooting. With the back quiver, which fit over the shoulder, just the act of pulling out an arrow would drag the blades against the leather interior and the shafts of other arrows—hardly conducive to preserving sharp edges. The advent of more sophisticated quivers which hold the arrows upright and separate from each other eliminated most of the former problems. Today's bow quivers not only keep arrows separate, but also protect the broadheads from each other as well as the elements.

At one time a fine-grooved file was considered sufficient to work a fair edge on the common two-blade broadheads. Following up with a whetstone to refine the edge was further insurance that the broadhead would do its job.

Initial edges are ground at the factory to a specified angle, and it may be difficult to follow this machine taper by hand. The best way to retain the angle as closely as possible is by simply observing where the tool is removing metal. On older heads the honing angle is fairly easy to determine by watching for the removal of rust or discoloration of less than superior metal. Presumably, the manufacturer has chosen what he considers the proper angle for the cutting edge of that particular head, so try to follow it.

When it appears you have the blade properly honed on both sides, check for a wire edge. This is simply a folding over of the thin cutting edge caused from too many strokes on one side. You can feel it by stroking the honed portion toward the cutting edge with a finger nail. If you feel the slightest resistance, you do not have a sharp edge, and the head needs more work.

By holding the blade in a strong light, you can sometimes see a tiny flat on the edge. Again, more work is needed.

It is always a good idea to examine brand new blades carefully. Occasionally there is a goof at the factory, and the

blades are only new, not sharp.

One of the newest sharpeners on the market, made specifically for broadheads, is manufactured by Diamond Maching Technology, 85 Hayes Memorial Drive, Marlborough, MA 01752-1892. Two 3-inch whetstones are electroplated with nickel and have micro diamonds partially imbedded. They are mounted on a stand that will accommodate two- to four-blade heads. The whetstones can be adjusted to the proper angle for uniform sharpening. Because the sharpening plates can also be adjusted to provide clearance for the point, blades can be sharpened for their entire length. No lubrication is needed, although occasional wetting with water will remove metal residue.

A number of years ago, Lansky Sharpeners, P.O. Box 800, Buffalo, N.Y. 14221, came out with a hone that could be mounted on a pedestal. It was fine for sharpening two-blade heads. I have carried the hone for years to touch up heads on extended trips, and I also use it for sharpening knives around camp. Although Lansky sharpeners are designed primarily to sharpen knives, the pedestal serves to hold broadheads firmly, and their hones can still do a good job of sharpening the heads. Stones can be purchased separately, from coarse to extremely fine. The pedestal eliminates the one problem with hand-held broadheads, as sharpeners lose some of their effectiveness because the hand is not firm enough to offer proper resistance to the tool.

Another sharpening tool that has served me well in the field is a diamond encrusted rod mounted in a section of deer antler, which came in a leather case. Smokey Wagner came up with this one when I visited his archery shop near Oil City in 1980. Several years ago I dropped and broke it, but a bit of glue put it back in commission. It came from Germany, but I can't put a label on it. Ask Smokey.

It has often been said that the best broadhead is the one you can place where it will do the most damage. That's true, but only if it's sharp.



# Shotshell History

By Don Lewis

Photos by Helen Lewis

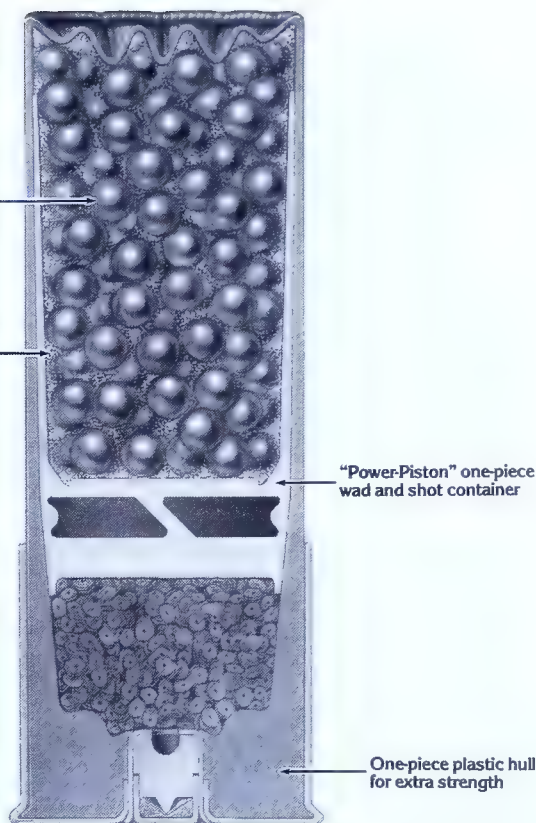
WHAT DO you think happened?" the customer asked as I examined his over-under 12-gauge. The barrels at the muzzle were forming a gentle "Y." In other words, each barrel had separated from the rib. "I had just missed a mallard with two of my favorite duck loads when I noticed something wasn't right at the muzzle."

"What do you mean by 'favorite duck loads'?" I asked. "Are they factory ammo or handloads?"

"Handloads," he fired back. "Factory rounds just don't generate enough power for me, so I make my own."

For safety reasons, I won't describe the makeup of his duck loads, but his attempts to produce a "super hot" reload cost him a set of barrels. I was frank with him; I told him he was very lucky not to have been injured.

It seems everybody is in a hurry to use the magnum shotshells. Is it true that the magnum is superior to the regular shotshell? Countless shotgunners implicitly believe it is, but that's not really the case. I have written several times that, from a velocity standpoint, there is little, if any difference between the two. Yet the 3-inch magnum chambering is in so much demand that it's next to impossible to sell a shotgun chambered for the 2 3/4-inch shell.



Remington "Premier" Shotgun Shell  
12-Gauge, 2 3/4-inch Magnum

**SHOTSHELLS** have gotten increasingly sophisticated over the years, as makers have developed new materials and technologies to make shotshells more effective.

I always suggest checking a shotshell reloading manual to those who feel the magnum shotshell offers greater velocities. In the 25th Edition of the Hodgdon Data Manual, for instance, 37 grains of HS-7 powder behind a RP12 wad will shove 1 1/2 ounces of shot out of the muzzle at 1320 fps from a Remington RXP 2 3/4-inch case. With 1 5/8-ounces of shot in any 3-inch paper base case, 40-grains of HS-7 behind a WAA12 wad generates a muzzle velocity of 1281 fps. The 3-inch case in this particular load offers 1/8-ounce more shot, but velocity drops slightly, if 39 fps is even worth considering.

My purpose in showing these figures is not to condone or condemn either the 2 3/4-inch or 3-inch shell; I'm merely





pointing out that the main advantage to the 3-inch case is not in velocity, but in being able to hold a larger shot charge. To support this viewpoint, I might point out that the 3-inch 12 can handle  $1\frac{7}{8}$  ounces of shot at better than 1200 fps.

#### The Mighty Magnum

It's possible that too much emphasis is being placed on the advantages of the magnum's larger shot charge. Many shooters are under the impression that an increase in the number of shot pellets automatically solves all their problems. That's not often the case. There's no doubt that, mathematically and over the long haul, any load's killing efficiency will be increased by the same percentage that one load is heavier than another. That is, it will increase hits according to the percentage of increased pellets, and that will boost delivered kinetic energy proportionately. However, in a practical sense this becomes important only after a certain minimum range has been exceeded. Up to that point, even the lighter shot charge delivers plenty of pellets, and thus energy,

**THE MIGHTY** 3½-inch 10-gauge magnum powers over the standard 2¾-inch 12-gauge. What many shooters don't realize, however, is that the larger gauge doesn't necessarily mean more velocity, just a larger shot charge.

for a quick kill. That's why I've long claimed that magnum shells are rarely needed for upland hunting. Field loads do the job at all normal ranges, and only a few true experts can take advantage of the magnum's long range efficiency.

The story behind the creation of the shotshell is interesting and worth discussing. According to Winchester-Western's Ammunition Handbook, the idea of a self-contained shot shell and the concept of the hinged breech for the two-barreled shotgun were developed by a Frenchman, M. Lefauchaux in 1836. In his apparatus, the shell featured a protruding pin. When struck by the gun's hammer, the pin punched into a fulminate mixture and ignited the black powder charge. The Lefauchaux pinfiring gun was probably not a very efficient fowl killer, but its brass-headed shells, and the paper tubes for the wads and shot, are direct ancestors of today's scattergun loads.

After smokeless powder appeared, modern laboratory facilities were used to study the speed and behavior of shot pellets and the effects of wads within the shell.

Early shotshells, whether of impregnated paper or made entirely of brass, used a roll type crimp and a thin cardboard wad—called the over-shot wad—to seal the shot within the shell. Many times the over-shot wad mixed in with the pellets when the shell was fired, which ruined the pattern. Around 1939 a new style of crimp, the pie crimp, was invented.

With this method shells are crimped by folding over or pleating the mouth of the shell body. When fired, the crimp unfurls to the shell case's full length. This led shotgun makers to cut the chamber to the full length of the fired case. With nothing ahead of the shot to interrupt their true flight, the new crimp eliminated the occasional dis-





AS DYED-IN-THE-WOOL pheasant hunter Lewis and Bell can attest, high brass shell shells don't mean more power than low brass. The height of the brass has nothing to do with what kind of load the case will take or how strong the case is.

rupted or “blown” pattern and often increased pattern pellet density by several percentage points.

Obturation, the sealing off of the rapidly expanding gases generated by smokeless powders, presented another problem within the shotshell. If these gases are not obturated, but instead permitted to blast into the lead shot, power and velocity are lost, and the shot is unnecessarily deformed or balled together by great heat. Conventional cardboard and felt filler wads didn't reliably contain this pressure.

By 1945 Winchester-Western technicians had developed a combination cup-shaped wad—the Super Seal base and cup wad—which provided a power-conserving seal. With this type of wad, the higher the gas pressure, the tighter the seal. This line of research and experimentation led to the development of today's one-piece plastic cup-type wad.

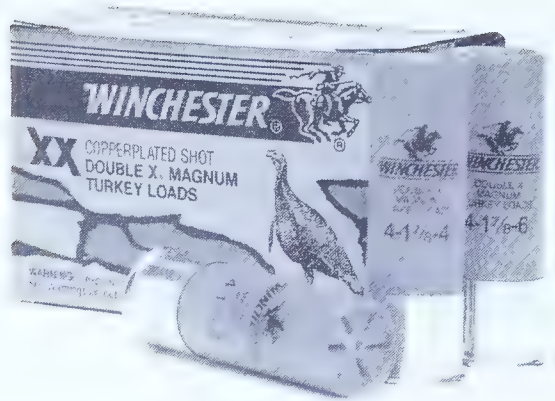
In the black powder days a hunter could add a little more powder and shot for longer shots, but that's not possible with modern shotshells. Operating at twice black powder pressures, and in chambers restricted in size, getting more power and larger shot charges poses some difficult problems. The

problems were partly solved by using compact or dense powders and shorter wad columns to give more efficient sealing. Combined, these components left space in the shell, which could then be filled with more shot so as to thicken the pattern and keep it dense enough for extra long range shooting. Or the extra space could be filled with the same number of one size larger shot, and still maintain pattern density while increasing retained velocity, energy, and penetration.

### Old Myth

Right here is a good place to kill off the old myth that small shot penetrates better than large shot. This is based on the theory that, much like a needle point, the smaller the point of entry, the deeper the penetration. That's not true.

Shot pellet penetration is determined by weight and velocity (or momentum). The larger the pellet, the deeper the penetration. I have pointed out many times that at normal rabbit and grouse shooting distances, under 30 yards, small shot such as 7½ offers sufficient penetration. However, small shot slows down at a faster rate than large shot. Consequently, with its momentum di-



**TODAY, ammunition makers are creating shells to fit particular needs. Winchester offers several loads for specific purposes, above, and Remington now offers shells containing two sizes of shot, smaller shot for normal ranges and larger shot for longer shots.**

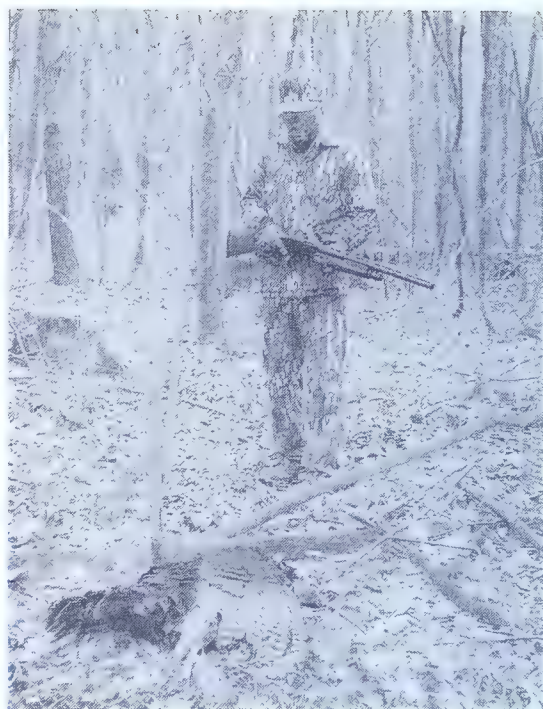
minishing, it loses its ability to penetrate.

It's interesting to note that shotgun sizes, gauges, were determined in a rather crude way early in the shotgun's development. The gauge referred to the number of bore-size lead balls it took to make a pound. For example, 12-gauge is the diameter of a lead ball that weighs  $\frac{1}{12}$  pound. A 16-gauge is the diameter of a one-ounce lead ball, 16 of which would weigh one pound. The 20 and 28 gauges were determined the same way. The .410-bore, however, being a late entry, follows modern caliber measurement methods rather than the old lead ball designations, and its true bore measurement is precisely .410 inches.

### Bore Diameters

Today's gauge measurements show that the mighty 10-gauge has a bore diameter of approximately .775 inches; the 12-gauge, .730; 16-gauge, .670; 20, .615; and the 28 is .550. These are the normal internal bore dimensions from the end of the forcing cone to the beginning of the choke constriction.

Winchester's Ammunition Handbook explains that only about three milliseconds (.003 seconds) elapse from the time the firing pin strikes the primer until the shot and wads leave the muz-



zle. During that time the shot charge accelerates from rest to between 1100 fps and 1350 fps. The powder did not explode; it burned rapidly, creating an ever-expanding volume of gas to drive the wads and shot forward.

Part of the energy stored in the powder is released as heat but most as kinetic energy. Newton's Third Law of Motion says that a thrust in one direction must be complemented by an equal thrust in the opposite direction. Shooters refer to the latter as recoil.

That means the heavier the shot charge and the faster it moves, the more recoil that will be produced. Furthermore, the lighter the gun, the heavier the recoil. That's one reason why skeet and trap shooters, who may fire several hundred rounds in a day, prefer heavy shotguns.

At one time, shotgun shells were basically selected by the height of the brass on the case. High brass was thought to be more powerful. Today, ammunition makers are creating shells to fit particular needs. Winchester's 12-gauge, 3-inch Double X Magnum, for example, carries a full 2 ounces of number 4, 5 or 6 shot. Those shells are designed for turkey hunters. Winchester packs these



in an all new camouflage Trebark 10-round pack.

Remington offers their SP 2x6s with buffered, copper-plated shot. This new entry in the turkey and waterfowl realm is loaded with two sizes of shot—2s and 6s. According to my shooting buddy Russ Whittaker, who dropped a 19¾-pound gobbler on the first day of the 1988 season, the Remington SP 2x6 worked to perfection at 32 steps. The smaller shot is for dense, uniform patterns at normal ranges, and the larger shot penetrates leaves and brush at close ranges, while still delivering plenty of energy and penetration on longer shots.

The high brass/low brass theory today is as dead as a week-old mushroom. We know now that the height of the brass has nothing to do with what kind of load



the case will take or how strong the case is. However, the hunter should be selective about today's "specialty" shotshells. It's no longer a matter of brass height; it's one of choosing a shotshell that is designed for your particular type of hunting. That's a step in the right direction.

## **GAMEcooking Tips**

### **Venison Makes Great Sauce and Casseroles**

Venison lends itself so well to soups, sauces and casseroles. Here is my friend Mary's favorite pasta topping and Aunt Mary's Postashoda, which is an interesting, spicy stew.

#### **Mary Behler's Tomato Sauce**

- 2 pounds ground venison
- 1 cup oil
- 1 large onion, minced
- 3 cloves garlic, minced
- 2 large cans (#2) Italian tomatoes
- 2 cans (6 oz.) tomato paste
- 1 can (1 lb) tomato sauce
- 2 teaspoons salt
- pepper to taste
- 1 teaspoon dried basil
- 1 cup sliced mushrooms
- ⅓ cup fresh parsley, minced

Brown the venison in the oil. Add the onion and cook two to three minutes. Add all remaining ingredients and simmer three hours, stirring occasionally. Serve with three pounds cooked spaghetti. Serves 8 to 10.

#### **Mary Malone's Postashoda**

- 3 tablespoons olive oil
- 1½ pounds ground venison
- 1 medium carrot, sliced
- 2 stalks celery, chopped
- 1 small onion, chopped
- 3 cloves garlic
- 2 tablespoons minced fresh parsley
- 3 cans (8 oz.) tomato sauce
- ½ teaspoon ground cloves
- ⅓ teaspoon nutmeg
- ⅓ teaspoon allspice
- ¼ teaspoon cayenne pepper
- salt to taste

Saute venison in olive oil until lightly browned. Add remaining ingredients. Place in slow cooker at low setting for two hours. Serve over rice or pasta. Serves 4.

—FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY



The Wyoming Game and Fish Department is studying the effects of oil-field development on the crucial winter range of deer and antelope. Crucial winter range is defined as those areas used during the most severe winters. They are usually relatively small areas at low elevations that have a series of ridges running perpendicular to prevailing winds, which keep the snow blown off, making food available. Although the public is usually restricted from these vital areas, winter oil-drilling was recently approved on a crucial winter range in the Rattlesnake Mountains west of Casper.

Last year five wolves in northern Alaska were equipped with transmitters that relay signals via a satellite. Those wolves and 13 others wearing conventional transmitters will allow biologists to monitor seven wolf packs in the Selawik National Wildlife Refuge, east of Kotzebue, and the nearby Kobuk National Park.

It took only nine months for the Izaak Walton League to raise the \$600,000 needed to buy a Bell helicopter for federal wildlife agents. The helicopter was received just in time for officers to start patrolling Louisiana bayou country, wintering grounds for 25 percent of America's ducks and where up to four million birds have been poached in a single year. More than \$250,000 was donated by sportsmen and allied conservationists, and \$340,000 was provided by the U.S. Fish and Wildlife Service. Bell Helicopter contributed by donating free maintenance and parts for one year.

Last December marked the 10th anniversary of Michigan's bottle bill. Despite claims at the time that the bill would cause the loss of jobs and public dissatisfaction, the law has proven to be a resounding success. As reported in the *North Woods Call*, roadside can and bottle litter was reduced 97 percent and 93 percent, respectively, in just one year; 600,000 tons of can and bottle litter have been recycled every year, amounting to annual savings of \$25 million; and energy consumption declined  $\frac{2}{10}$  percent, the equivalent to 650 million gallons of gasoline. As for jobs, the mandatory deposits resulted in a net gain of 4100 positions, although there were declines in the can and glass manufacturing industries. Finally, according to a recent poll, 90.7 percent of the people surveyed support the bill.

It's been estimated that hunting expenditures in Colorado amount to \$589,989,000 a year, and that fishing expenditures account for \$687,619,000 of the state's economy. Just elk and deer hunting expenditures are estimated to be \$260 million and \$240 million, respectively.

According to the International Bird Council, of the world's 9000 species of birds, more than 1000 are in danger of extinction. As reported by the National Wildlife Federation, that's three times the number considered endangered just ten years ago. The problem is most severe in the tropics, where deforestation is destroying the habitats for many animals.

#### Answers:

- 2 They are called ganders. "Honkers" is a nickname.
- 5 Ganders act as guards while the female sits on the eggs.
- 7 The young are called goslings.
- 8 Adults molt, or lose their flight feathers for about 3 weeks every year, during which time they are unable to fly.






## **Voluntary Waterfowl Stamp No. 7**

Pennsylvania's 1989 waterfowl management stamp, a pair of hooded mergansers by Orange, Virginia, artist Ronald Louque is the seventh "duck" stamp offered by the Game Commission. Funds derived from stamp and print sales are used for wetland acquisition, habitat development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. For a savings, the cost for five or more ten-stamp sheets, in any combination of years, is \$40 per sheet. The 1987 stamps will be available through December 31, 1989, at which time all remaining supplies will be destroyed.

Stamps are available at the Game Commission Harrisburg headquarters, region offices, Pymatuning and Middle Creek Wildlife Management areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints of this design are available from art dealers and galleries nationwide.



JERSEY SHORE  
April 9

FRANKLIN  
April 9

DALLAS  
April 8

1989 BIG GAME SCORING PROGRAM  
9 a.m. to 3 p.m.

LIGONIER  
April 8

HUNTINGDON  
April 9

READING  
April 23



Nicholas A. Rosato



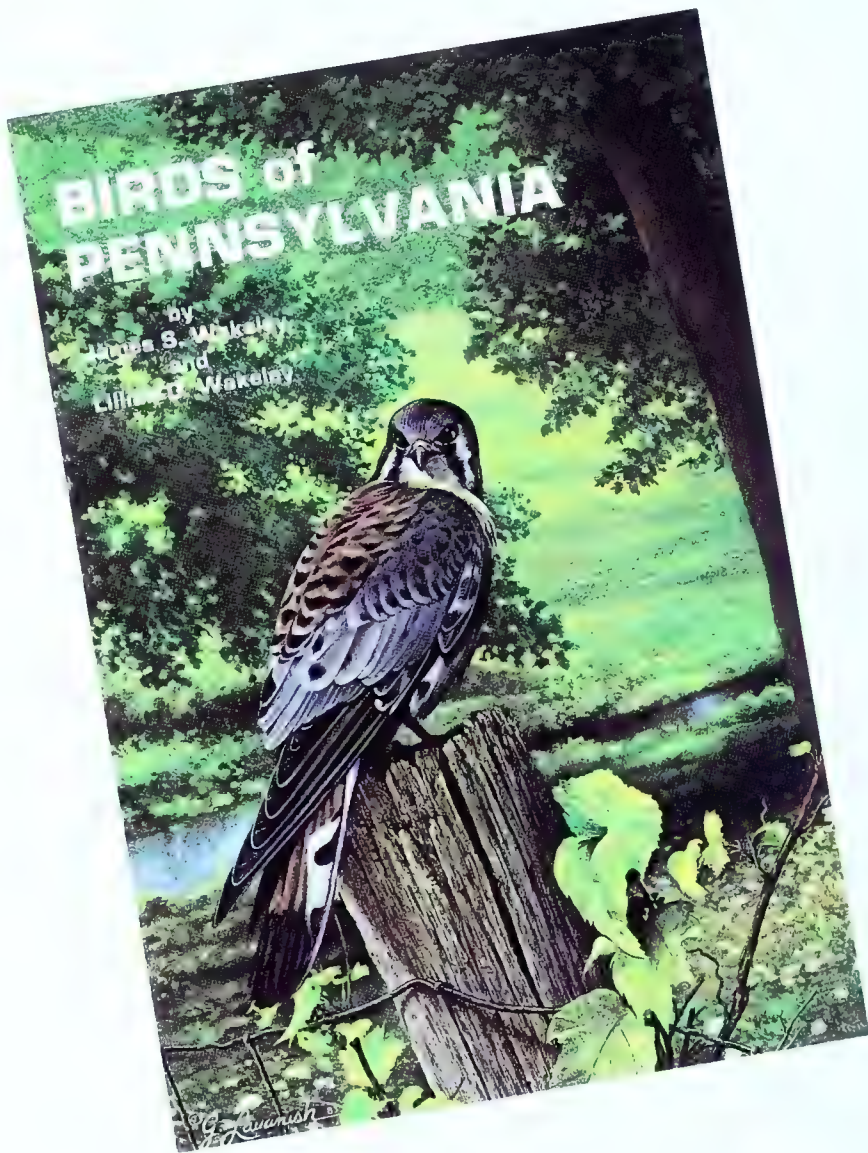
# PENNSYLVANIA GAME NEWS

APRIL 1989

ONE DOLLAR



GERALD W. PUTT  
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COVER PAINTING BY GERRY PUTT  
(Cover Story on Page 29)

## Band Aid

WITH THE arrival of spring comes the mating antics of the wild turkey. And soon to follow will be tens of thousands of turkey hunters, each hoping to fill his tag.

Unfortunately, however, it's become all too predictable that many hunters—maybe even you—will become the victim of a hunting accident, an accident that could very easily be avoided.

While nearly all other types of hunting involve the hunter intercepting the quarry during its normal course of activities, turkey hunting is different. The turkey hunter actually acts like the very bird he and countless others are out to kill. After taking great pains to conceal himself, the turkey hunter proceeds to make the sounds birds do to attract mates. Those same sounds, however, also attract other hunters.

There were 131 hunting accidents in Pennsylvania last year. Of those, 29 (22 percent) involved turkey hunters. If turkey hunting accounted for a similar percentage of the total hours people spent hunting, then that accident rate would not be so alarming. But we know that isn't the case. Turkey hunters lay claim to a very disproportionate percentage of hunting accidents.

Many people think we should seek legislation that would create a safer turkey hunting environment. "Mandatory fluorescent orange," say some. Others suggest we establish a "turkey hunting stamp," with a fee high enough to discourage the casual turkey hunters from participating.

Those and other suggestions may have some merit, but the answer still lies with each hunter who sets foot in the woods. Laws often are necessary only after it's shown that we, hunters, can't remedy our problems by practicing good old common sense.

While it's always good to remind each other of the need to positively identify our targets before shooting, to not wear the colors red, white and blue, and to never stalk what sounds like the call of a wild turkey—an illegal practice, by the way—I'll stray from the traditional advice by suggesting that you also use fluorescent orange, but in some unconventional ways:

1. Wear an orange hat while walking into and out of the woods. Often, the victim of an accident wasn't hunting at the time, but merely going to or from a hunting spot.
2. Carry some type of orange cover to place around your gobbler after harvesting. A small percentage of turkey hunting accidents involves a successful hunter being shot while carrying his bird from the woods.
3. And, most importantly, consider wrapping a fluorescent orange band around the tree you set up against.

Some of the most recognizable names among turkey hunters have proven that turkeys can be called to a hunter dressed head to toe in fluorescent orange. It's not the color that spooks birds, it's movement.

If fluorescent orange scared turkeys, you'd not find a bird anywhere, because Penn's Woods is littered with signs, markers, blazes and many other brightly colored reminders of man's presence.

The Blue Mountain Chapter of the Wild Turkey Federation has been promoting the use of fluorescent orange for years, by supplying materials for hunter education students, and even by selling fluorescent orange safety bands for turkey hunters to use.

The Game Commission, too, is now offering fluorescent orange bands for turkey hunters. Our band is four inches wide, six feet long, with Velcro® fasteners. At a price of \$3, delivered, there's no profit margin, but if their use helps to promote better safety among turkey hunters, then the investment was well worth it. —*Mike Schmit, Southeast Region Information and Education Supervisor.*





IF MORE were aware of saw-whet song, the bird might not be considered the rarity that both conservation agencies and amateur birders regard it. All this bird really requires is dense habitat, which translates into cutover lands or neglected hollows with crowded understories.

# Spring's Calendar of Sounds

By Bill Rozday

**F**EW PLACES on earth show the change from winter to spring like the woodlands of the eastern United States—even if, like those I walk, they are located in proximity to an expanding suburb. As a matter of fact, the more abused by man and tangled up by scrub growth, the richer the woodlands are in that seasonal element native wildlife brings to us—spring sounds.

Many spring sounds are unpretentious and little known, but are nonetheless genuine harbingers of the season. The voice of the red squirrel is a prime example. The animal speaks when spring unfreezes the dense spicewoods and grapevines of the western Pennsylvania woodlands: a chirring note rings out in the strengthening light, through the blue wood smoke of a brush-cleaning fire.

The red squirrel's color is a complement to its voice. While brown leaves cover the ground and gray branches

stand on trees, this animal runs along with a tail that is a warm mixture of orange, red and brown that suggests the rich color of a fine walnut gunstock. Pausing to deliver that enthusiastic chirr, the red squirrel is the color of life breaking through the drabness.

## Precedes All Others

In my woods, at least, the red squirrel sound precedes all other sounds of spring, which follow an unchanging order that renders irrelevant any variation in their particular dates of occurrence. There is a calendar of the woodlands the equivalent of wall calendars here, the red squirrel's chirring occupy the first block of time.

In the second block is the singing of wood frogs. They produce a busy sound, a quacking noise that increases with rising temperatures and moisture. And, unlike red squirrel sound, it stays with us after dark and continues at a steady

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pace. The sound is distinctive, but it in no way resembles the croaks of bullfrogs or high notes of spring peepers familiar to many and is thereby classed as obscure. It may be that wood frog sound is unfamiliar because people are accustomed to amphibious activity only in true marshes and swamps. Our wood frogs sing from a woodland pool formed from a spring seeping and gathering within a landslide.

### **Third Entry**

When the first warmth of spring settles into a pattern of clear nights and sunny days, the woodlands record the third entry on the calendar of wildlife sound. It is a trill that comes from the depths of the trees—another type of woodland frog, the listener assumes. In reality, that trill consists of a rapid repetition of “too” sound, a sound for which a bird is responsible—the saw-whet owl.

If more were aware of saw-whet song, the bird might not be considered the rarity that both conservation agencies and amateur birders regard it. All this bird really requires is dense habitat, which translates into cutover lands or neglected hollows with crowded understories. When the local woods were cleared of undergrowth by logging and the saw-whet vanished, I subsequently heard the bird's trill from a thicket of sweet birch near my second home in the central Pennsylvania mountains.

Timing is crucial, however. Saw-whet song ceases after the first days of dry and clear weather, when the bird retreats into the dense places where no one wants to endure the sweat and deerflies of summer to find it. Most of us spend our lives without encountering one, and a sighting is regarded as a gift of fortune.

Yet, if a person ever succeeds in finding a saw-whet owl, he discovers a living myth—the innocent creature of the wild that behaves as tamely as a pet parrot. These birds, which often spend their lives without seeing a human being, perch on branches a few feet away and stare with their yellow eyes, making no attempts at evasion other than, in a situation of great stress, a flutter onto a nearby limb. Because the saw-whet measures only seven inches in length, the person unfamiliar with the species often mistakes it for a helpless nestling of some other kind of owl.

The bird whose voice fills the fourth blank in the calendar is, like the saw-whet owl, a restricted presence in the woods, one confined to the hours of dusk and darkness. The hunter, however, knows this bird—as a whistling target on autumn days—the American woodcock.

The woodcock often announces its presence in our western Pennsylvania woods on the same day as the saw-whet, but it waits until evening falls before delivering the “peent” sound that constitutes a notable part of its mating routine. The song often continues into the night and accompanies the singing of the saw-whet.

The woodcock near our home spend much time around a sandstone pit that, in the 15 or 20 years since it was excavated, has acquired a floor of moss and a scattering of orange poverty grass and dewberries. At the same time, however, the area has retained two spots of marsh that formed upon the destruction of the land's drainage pattern. There is where I view the bird's mating flight.

One evening, my steps drawn toward a “peent” similar to the buzz of a utility wire, I approached one of the marshy spots and saw a bird race into the air like a moth and continue upward to an extreme height. A twittering noise issued forth from the bat-like form describing an energetic circle in the dusk. In a short time, the woodcock fell to the ground like a wet leaf blown by a downdraft. At that point, it resumed the rasping notes that had drawn my attention to



**IN MY WOODS**, at least, the red squirrel sound precedes all other sounds of spring, which follow an unchanging order that renders irrelevant any variation in their particular dates of occurrence.

it and prepared for another flight to follow in a moment or two, another attempt to attract a mate.

When the first spell of warmth brings a night of south wind and thunder-showers, and the calendar of sounds is evident throughout the woods, the next space in the scheme takes form in an obscure occurrence along country roadsides. Where the leaves of the previous fall have drifted over the steep banks, stirrings from beneath them create scratching sounds in the middle of the night. With no source of the sound visible, the bank itself would seem to be creating it. A close look, however, discloses newly-emerged nightcrawlers responding to the warmth and moisture and moving against the brittle sides of the leaves.

By the time woodcock have danced, the lengthening days have sent the sun into the recesses of dense woodlands and incited the next of the spring sounds, the drumming of ruffed grouse. The grouse raise a family in our Ohio Valley woods every season, not merely because the area is remote but, rather, because it is neglected and tangled. On one of the many logs that litter the forest floor there, the male vibrates its wings and creates a sound audible for a good distance. It begins with single thumps that speed up and create a general vibration that makes the upland hunter conscious of this bird during a time of pleasant weather rather than autumn rain.

The sound that earns the widest regard as an indication of the new season, the cry of spring peeper frogs, falls into place in our woods after the weather has settled into predictable warmth. In many regions, it carries on into early summer and loses a measure of credibil-



ity as a sound of spring. It fills a well-defined niche in our calendar, however, because it cries out from the familiar environment of the sandstone excavation, from a spot of marsh there.

The high-pitched trilling of another amphibian, the common toad, becomes evident when spring has gained momentum and the seasonal rains have left standing water in the excavated area; the emergence of life is complete by then. Despite hearing a toad trill, we never imagine the creature of the garden plot embarking on an earnest mission to a pond, risking automobiles and predation in order to mate, never associate the plaintive trill it produces with its bulgy eyes and humble habits.

In this chopped-up piece of second-growth woodland that I hike through, the new season presses forth in determined fashion with a surprising range of natural music. The settings are humble—rotting logs of black locust, a sparse area of excavation, tangles of grapevines. Yet, they represent an edge, an interaction between time and the earth, rich in meaning for the thoughtful ear.





# The Old Rifle

By Al Shimmel

**I**T HUNG on the wall beside the kitchen door, on a set of 10-point antlers which came from a deer my great grandfather killed. There, too, hung his bullet pouch and powder horn. My grandfather kept them near the kitchen door so they would be readily at hand when needed in his never-ending war against the critters that molested his crops. Included among his equipment was a small sharp knife for trimming the surplus cloth from the greased patch that was used to snug the ball into the rifle bore after the powder had been put in place. This same knife was also used to field-dress game.

I lived in a little house a few hundred yards down the lane below the farm and had permission to explore the lane as long as I kept within the rail fences that bordered it. I explored not only the lane, I also spent much time gazing between the rails at what lay beyond. There was the Owl Woods, the peach orchard, the pasture lands, and the farm garden with its tight, paling fence to keep out the little animals that had an appetite for the tender vegetables that were Grandmother's pride and joy.

I never tired of watching the squirrels that used the rail fence for a highway. The saplings and bushes that filled the fence corners were the homes of countless chipmunks and a multitude of birds.

A woodchuck had its den between the Owl Woods and Grandmother's garden, beside a decaying pine stump. Sometimes I caught glimpses of it as I peered between the rails. One day I saw three young ones as they fed, partially hidden by the lush grass.

When they had grown large enough to forage alone, trouble began. One of the young chucks discovered there were green beans to be had simply by tunneling under the fence. When Grandmother discovered the vandalism she

reported to Grandfather. Early next morning, just as I was about to go up the lane, I heard the report of Grandfather's rifle and saw the resulting puff of smoke. I saw him open the garden gate and recover the young chuck from the bean patch.

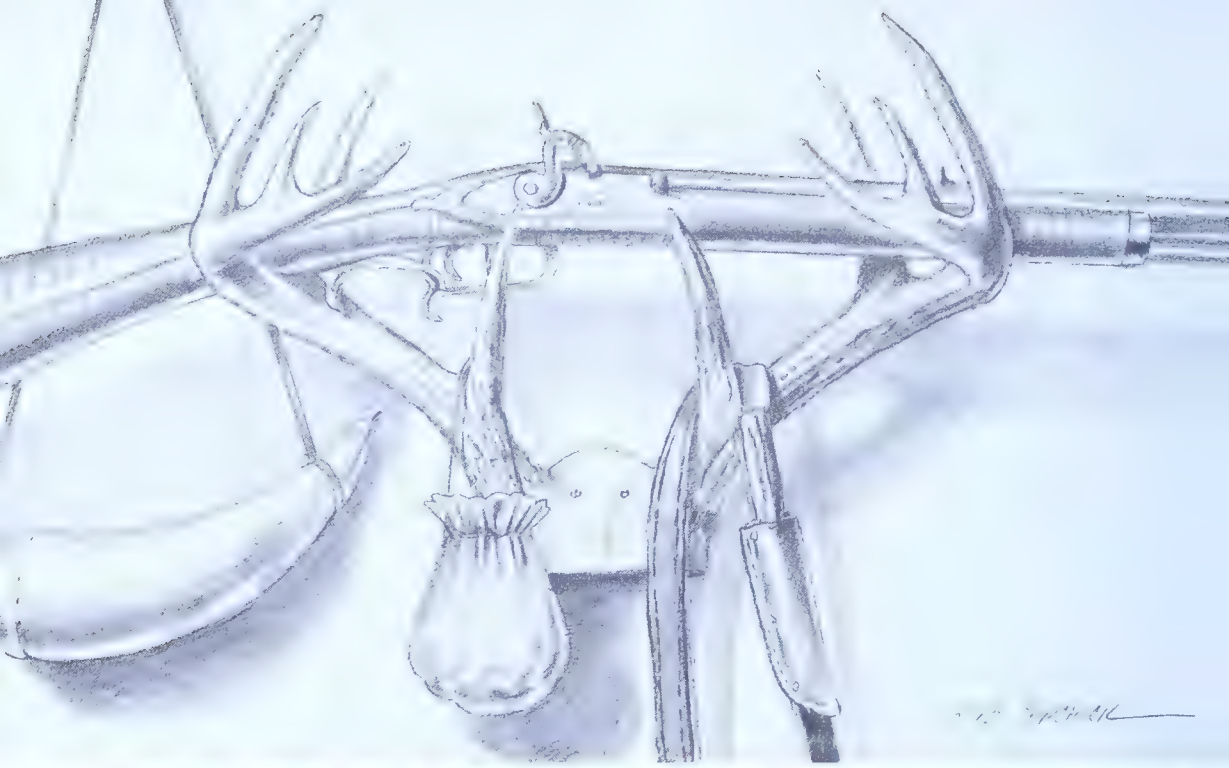
I hurried up the lane and held the chuck while he field-dressed it and removed the hide. The meat he carried to the kitchen; the hide was tacked to the shop door to dry. Later, it was treated in lime water so the hair could be easily removed, then softened and made into lacings for belts and strings for boots.

Such use of things that were generally discarded by others impressed me early on that nothing that could be used should be wasted.

I was given to understand that nothing was to be killed except to protect crops, furnish food or supply some other pressing need.

Early one spring morning as I passed the Owl Woods I heard a sound that reminded me of the engine that ran the threshing machine or powered the cord wood saw.

Walking very slowly and quietly, I peeped between the rails of the fence and saw a large bird with a spread tail that reminded me of the turkey gobbler on the farm. It stood upright on the log, its tail spread to brace its body, and with a quick motion of its wings, it produced a thumping sound. Faster and faster they moved until the sound was almost continuous. For the first time I saw a grouse drum. It stood looking this way and that. Then it stepped down from the log and slowly strutted about the clearing. Soon it returned to its log and repeated the performance. I sat fascinated, and then, craning my neck to get a better view, the bird caught the movement of an unfamiliar tow-head between the rails and quickly disappeared into the woods.



**IT HUNG on the wall beside the kitchen door, on a set of 10-point antlers which came from a deer my great grandfather killed. There, too, hung his bullet pouch and powder horn, and a small sharp knife for trimming cloth from the greased patch used to snug the ball.**

I hurried home to tell my mother what I had seen, but I couldn't accept her answer that it was a grouse. After lunch I hurried up to the farm to tell Grandfather. He sat on the bench near the door, looking out over his fields while his team rested. He explained that it was nesting time, and that I had seen a male grouse drumming to attract a hen. He explained that it was also a challenge to any other male grouse in the area that this was his territory and he would defend it. He also explained that grouse drum for the same reason a rooster crows. He said that many people hear grouse drum, but few ever witness the performance.

When my father came home that evening we sat on the porch while I shared my adventure with him. Shortly after sundown the muffled drumming came again. My father repeated what my grandfather had told me. It was that humble beginning that has given me a thrill that has not dimmed over three-quarters of a century. In that time I have spent many pleasurable hours, both observing and hunting this fine game bird.

The Owl Woods was a small woodlot, but I seldom visited it without finding

something of interest. Many times at night we heard the booming hoot of a great horned owl. Occasionally it perched in the yellow poplar tree behind the house and called to another that seemed to be in the big timber farther down the lane. We heard them most frequently in winter and sometimes before a storm. They also called by day, particularly if there was a heavy overcast. I often searched among the tangle of grapevines that massed in the treetops, but all in vain.

One autumn day as I gathered fox grapes that hung from the branches within reach, I looked up and saw, sitting close to the trunk of a big oak just below a tangle of vines, my first horned owl.

When my father came home I told him of my discovery and we went back to the spot. The owl was still there. Father pointed out some gray pellets of fur, feathers and bones. We gathered several of them and moved to a log some distance away so as not to disturb the owl. Once there he explained that the owl tore its prey into pieces just large enough to swallow. The indigestible material was rolled into pellets which



were expelled through the mouth before it began its nightly hunt.

We discovered the skulls of some small squirrels, masses of fur and broken bones of cottontails, and also some hair that Father said was that of a skunk. In one pellet were some feathers that Father said was one of Grandmother's young chickens that persisted in roosting in a tree rather than in the poultry house where it belonged. To the farmer the owl did more good than harm.

A week later I was gathering grapes for juice and jellies when I was aware of a spatter of juice and the noise of falling grapes on the dry leaves. Looking up I saw a raccoon reaching out and pulling the bunches toward his mouth. He was devouring them with apparent relish; his muzzle and paws were stained with the purple juice. I hurried up to the barn to tell Grandfather. He growled—through his heavy mustache—something about the thief that had destroyed some of his sweetest corn.

Grandfather took his rifle from its place, slung the bullet pouch and powder horn over his shoulder, and we then walked quietly down to the grape tangle at the edge of the woods. The rifle was always fully loaded, except for the percussion cap that set off the charge. He slowly raised the rifle, set the hair-trigger and sighted for an instant. The report and puff of smoke was followed by a confusion among the branches then a dull thud. "He won't steal any more corn" was Grandfather's only comment.

He calmly took a ball from the pouch, and holding it in his palm, poured a neat cone of powder to hide it. Carefully he allowed the powder to trickle down the barrel. He seated the ball, half its dimension on a greased patch, then using his knife he trimmed away the excess cloth. With the ramrod he pushed the ball down the barrel until it was firmly seated on the charge. Then and only then did he cross the fence to retrieve his game. When he passed it over the fence I found it was extremely heavy. He carried it to a convenient stump where it was field-dressed. The entrails were



THE WHITE-TAILED DEER is the eighth species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for non-game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patches of the snowy egret, bluebird, bobcat, kestrel and elk are still available; those of the osprey and river otter are sold out. Decals (\$1 each) are available for all but the egret and deer. Order from the Game Commission, Department AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.

carefully covered and secured beneath a stone.

We walked up the lane to our gate where he turned to me and said, "You're invited for supper tomorrow night. We will have roast coon." I did not need a second invitation.

I was now of a size that I was occasionally asked to ride the horse while the corn was being cultivated. It made me feel that I had a very important part of the job. At noon we had dinner and the animals were rested for an hour.

### Quietly

One day as we were sitting on a bench just outside the kitchen door that overlooked the very field where we had been working, a crow flew from the woods and began to pull the newly sprouted corn. Quietly, my grandfather left the bench and went into the kitchen. He came out with the rifle and bullet pouch. I saw him take a cap from the box in the bullet pouch and place it on the nipple, twisting it to be sure it was firmly seated. He then walked swiftly to the big cherry tree that grew



**LOOKING UP** I saw a raccoon reaching out and pulling bunches toward his mouth. He was devouring them with apparent relish; his muzzle and paws were stained with the purple juice.

in the yard, keeping it between himself and the crow.

To me the crow seemed a long distance away. Leaning a shoulder against the tree, he slowly raised the rifle. There was the expected report and puff of smoke. I saw the crow lying where a moment before it had been pulling corn.

Grandfather helped me over the fence and sent me out to bring the bird. When I returned he took a bag string from his pocket and tied it to the crow's leg. He then walked down to the bean poles that were stacked in a corner of the garden fence. Selecting one that was bent at the end, he attached the other end of the string and carried it out to the very spot where a few minutes before the crow had been pulling corn. He stuck the stick in the ground in such a way that the bird would swing freely, as a warning to others of its kind. He found good use for even a dead crow!

After we moved away from the farm it became a family custom to return at Thanksgiving. The morning was given over to butchering. After the hogs had been dressed, they were allowed to hang for several hours to cool before the meat was cut up. I had grown considerably and now was responsible for the fire that heated the water in the black iron kettle while my father and his brothers attended to the work at hand.

After dinner, Grandfather suggested that the team be hitched to the sleds and we go to a shooting match that a neighbor was holding at his farm.

My father and one of his brothers decided to stay and look after the chores while Grandfather, a cousin and myself should go to the match. It was my first attendance at one of these rural contests, although I had often heard others talk of them.

Each contestant was given a small square of cardboard, a tack and a slab of wood. These slabs with their target attached were set up at 30 yards, against a wooden framework that held them erect. The prize was a chicken and the cost was five cents for each shot. Each round was limited to 15 marksmen.

### Ten Cents Per Shot

My grandfather watched the shooting but did not join the sport until the prize was a turkey gobbler, at ten cents per shot. When it came my grandfather's turn, his bullet touched the tack but did not drive it. Another contestant drove the tack and was judged the winner.

The last contest of the day cost each shooter one dollar and there were 20 marksmen. My grandfather placed his money and drew a high number, which meant that his turn came after many others had shot. The prize was a yearling steer.

On our way home that afternoon I sat on the back of the sled and held the rope that led the steer. I remember that the competition had been keen. Some of the marksmen had been woodsmen who spent much time with their rifles. They were very much surprised that a farmer could best them in the shoot.

Grandmother came from the granery with her pail of chicken feed just as we came into the barnyard. She looked us over carefully and then said to Grandfather, "Morris! Just what we need, an-



other beef to fatten!" In spite of her tone, I think she was pleased. My father came with the others to inspect the animal. Grandfather's pride was only partly hidden by his mustache.

It was not long after that incident that the rifle came to my father (he was the oldest son). He was a hunter, but generally with a 22 or a shotgun. I remember only one time that he took the old rifle hunting. When he came home, he had a half dozen squirrels, all head shot. When I asked about the hunt, he said that he preferred his own guns as the old one took too much time to load.

When each of his five sons were old enough to hunt, he taught us to use firearms safely. In squirrel hunting, he demanded head shots so not to ruin the meat. I recall hunting cottontails on a tracking snow when we took turns at trailing them so everybody got shooting. The memory of those days left a lasting legacy of sportsmanship.

Some years after I had a home of my own, my father gave the rifle to me. He mentioned that it needed a new ham-



mer spring. For years it set in an attic corner until I became interested in restoring it to a useful condition. By that time the maple stock was so old it could be scarred by a thumbnail. During the course of restoration I found that the breech bolt was fractured, so I replaced it.

"For your birthday," I said not long ago to my son, "I give you your great, great grandfather's rifle. It is in fairly good condition and will probably some day be passed on to Steve. If so, it will have at that time been owned by the sixth generation, of our name.

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# Long Hot Summer

By Bob Clark

**D**URING JULY 1988, Pennsylvania's normal warm summer somehow went out of control. How hot is hot? Record heat set in at close to 100 degrees and above. On one particular day it reached 103. Pennsylvania, like most of the nation, was in a severe drought; 22 days of no rain and none predicted for another 15. Wildlife was running out of water on the mountainsides. My wife and I were going about our normal summer activities as we sought lower temperatures in our mountain retreat on the 84,000-acre Michaux State Forest, located south of Carlisle.

We had slept in after sitting up into the wee hours of the night, watching deer, gray foxes, skunks, opossums and raccoons come to our feeder. Those nocturnal animals were showing no signs from the heat and enjoyed the peacefulness and quiet of our lodge, with competition only from each other.

## High Noon

It was high noon on this record 103-degree day, and I had sat down at my work table on the porch to read the mail and process orders for my turkey calls. As most turkey call producers who specialize in high quality products and low volume sales, I personally test every call I mail out. Giving little thought to my calling, I was making yelps, clucks and tree calls, packaged up the calls, and then continued on with other things.

Although it was mid-day a deer came down to the feeder, possibly trying to beat the other deer to the corn. My wife was sitting in front of the fan, observing the doe, when all at once, she spoke out that there was an ostrich-like head beyond the deer. I reacted immediately. As I moved to the edge of the screened in porch for a better look, a large hen turkey flew up to a dead oak limb caught in the crotch of a tree. There she stood, looking straight at our porch. About that

time the deer, seeing the turkey above and behind it, took off right down the path the bird was sitting beside. The bird then immediately plopped down from her perch to the forest floor and disappeared in a patch of berry bushes about three to four feet high.

Not wanting to disturb her, thinking she might have chicks along, I didn't leave for a closer look. In contemplating about why this turkey had come into view, (the fact is we have lots of turkeys, but none have come within 200 yards of the lodge for years,) it finally dawned on me that she had come because of the spring hidden in the barberries behind our neighbor's cabin. Further, she may have been responding to my turkey calls. Without water on the mountainsides, spring seeps dried up, and with young chicks needing water, she in her wisdom had brought them right down the ridge, through the pine plantation in back of our lodge, and to the spring.

With another deer at the feeder, looking me in the eye and telling me to get some corn, I went out and filled the trough. As the corn hit the feeder, which is located about ten yards from the edge of the barberry thicket, one hen flew up and then another. They landed in some tall oaks near the spring. Small turkeys about the size of grouse were flying high into the treetops, and it seemed I had broken up the flock, although certainly not intentionally. The thick underbrush separated the chicks from the hens, and at only 50 yards, it didn't take them long to start their whistle, "Mom, where are you?"

I could see two hens high in the oak tree. They just sat there looking around, but not too excited about the situation. More whistles and kee-kees and then three danger perts came from one of the hens when a hawk swooped down at one of the chicks sitting high out on an oak branch. It all happened so fast I could





not believe my eyes. As the hawk came gliding through the trees, the mother hen, all in one swift motion, called out three danger perts and literally knocked the hawk out of its flight pattern. As the hawk went on its way, with a bruised reputation, the other hen immediately dropped to the forest floor, about 75 yards from the bulk of the chicks, and made three hoarse yelps.

Turkeys teach us many lessons, and there were lessons to be learned by chicks and a hunter this day. I heard none of the old hen assembly calls. There was no continuous whistling and kee-keeing, just young turkeys flying directly into the deep underbrush of barberry cover, right on target at the feet of a hen turkey.



**TURKEYS** teach us many lessons, and there were lessons to be learned by chicks and hunter this day. I heard none of the old hen assembly calls, and there was no continuous whistling and kee-keeing.

My wife joined me out in the yard after the two large hens flew to the top of the oak trees. We both observed the silent but deliberate movement of the chicks to the hen. And although we saw only seven chicks, I know there must have been more moving on the ground. We backed off to our porch and left the hens and their chicks alone.

After 15 minutes all seemed to be back to normal, and the birds were not

seen or heard from anymore that day. I suspect that as long as the drought remained, the hens led them daily to the spring. Such movements into strange territory, however, are full of dangers, especially for the young chicks. I wonder how many chicks get picked off by hawks at springs and streams as the turkeys move to find water during such droughts.

To me as a professional turkey hunter was the confirmation of the calling, particularly the limited amount of calling the hen turkeys made to the young chicks. I estimate they were about 45 days old.

Last year's spring gobbler season showed me a tremendous change in turkey calling activity. I noted it first in Mississippi, then on in Alabama, into South Carolina, back in Pennsylvania, especially, and also in New York. From what I heard, gobblers were very shy, and in many cases they limited their vocal approaches to the hunters.

Gobblers slipped away from me at 80 yards too many times last spring, due mostly to hens. But even then they often gobbled only once or twice, even when they were not with hens. I talked with five Pennsylvania turkey hunters in South Carolina who had seen or heard 76 turkeys in four days; they killed only one jake. Gobblers were not running or even walking to their calls anymore. I personally saw a perfect set up in Cumberland County on a gobbling turkey that moved only 200 yards in an hour and a half, and it turned out to be a jake.

I talked with a hunter in the Sinnemahoning area (big woods wilderness country) and he had made two yelps at daylight and fell asleep, only to be awakened up an hour later with three gobblers feeding in front of him, all within shotgun range.

And last but not least, I lost a good gobbler in Pennsylvania. Something is happening to those darn turkeys. I heard him just before daylight one time, but I couldn't pinpoint his location. When I heard him again I knew he was out about 200 yards. I moved in just at daylight, making sure I didn't overrun



**FUTURE** spring gobblers will not get any easier to call within shotgun range. Limited calling and more patience will prove to be of more importance, along with selecting the right position.

him, and set up. I looked around and then presented several tree calls. I made no other calls, period. The gobbler made no more gobbles, and after an hour, nothing happened. I thought in calling less—that seemed to be what they wanted—so I sat longer than usual. Finally, my legs could take no more. I carefully looked around, saw nothing and rolled over. But, just as I rolled over, (remember an hour later) the gobbler flew down and dropped onto the forest floor, only 100 yards away.

Needless to say, he left the country immediately.

Spring gobbler season is a long way off as I sit here at my typewriter, but you can be assured, future spring gobblers will not get any easier to call within shotgun range. Limited calling and more patience will prove to be of more importance, along with the best position that we have harped on for years. Fall gobblers will continue to be hunted



with limited calling and much more patience, but birds of the year will continue to come to the old hen assembly call and the whistle and kee-kee run with their normal response and speed.

The bottom line is, scouting for spring gobblers will become even more important, but preseason calling should be completely eliminated. Those of you who continue this practice make it awfully hard on the average turkey hunter, and even those of us who've seen the changes and recognize them, find it getting more difficult to call in spring gobblers and even fall gobblers with any ease.

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**THE DAUGHTERS** of the American Revolution recently presented the Game Commission with a flowering dogwood, which was planted at our new headquarters complex. Making the DAR presentation is Marguerite Flounders, right, DAR State Regent, and Loraine Prutzman, State Conservation Committee Chairman.



# In Praise of Serviceberries

By Joseph B.C. White

ONE OF THE first blossoming trees of spring is the serviceberry, *Amelanchier canadensis*, also known as the shadbush, sarvis, sarvisberry and Juneberry. Its delicate white blossoms seem to pop out overnight in the first warm days of April on into May, dotting the otherwise barren woodlands with a welcome sign of new life.

From a distance the flowers almost resemble popcorn, puffs of white contrasted against the grays and browns of the spring forest. They provide a novel emphasis for the dark greens of cliff-hugging hemlock and mossy stream-banks.

*Amelanchier*, a member of the rose family, is represented by 30 species in the northern hemisphere, six of them reaching tree size. There are four species to be found in Pennsylvania, scattered across the state in all 67 counties. *A. arborea* is the only one considered a tree. The others are shrubs, often found in multiple-stemmed clumps. *A. arborea* may grow to 30 feet with a rounded crown and a three-inch trunk. Tough and flexible, it is capable of withstanding winter ice storms and high winds.

The serviceberry's bark is beautifully striped gray when it is young, sometimes touched with a hint of pink, smooth and satiny to the touch. Older specimens tend to become scaly and rough near the base.

The tree species is found singly and in clumps, similar to its shrub relatives. It seems to prefer open areas with moist



**ITS ATTRACTIVE** spring flowers, satiny gray bark, fall color, fruit and shape have made the serviceberry a favorite landscaping choice in parks, estates, arboretums, and in ordinary yards and gardens.

soil, but it is also found in sterile, shaly soils, although there it is generally smaller. It is commonly found along forest edges, at the edges of forest roads, cliffs, streambanks, and as a regular member of the hardwood forest understory community in the highlands.

The wood of the serviceberry, though hard and dense, has limited commercial applications, largely because of the small size of the tree, and because the wood warps and cracks easily. Creamy to reddish brown in color, the wood takes a high polish and is used to a limited degree in turnery, for walking sticks, canes and dowels. This is one of the hardest woods in North America and one of the heaviest in the United States, equalled only by the hop hornbeam, sometimes called ironwood, which weighs 51 pounds per cubic foot. Serviceberry weighs 48.85 pounds per cubic foot and is stiffer and stronger than white oak.

In spite of its limitations as a lumber



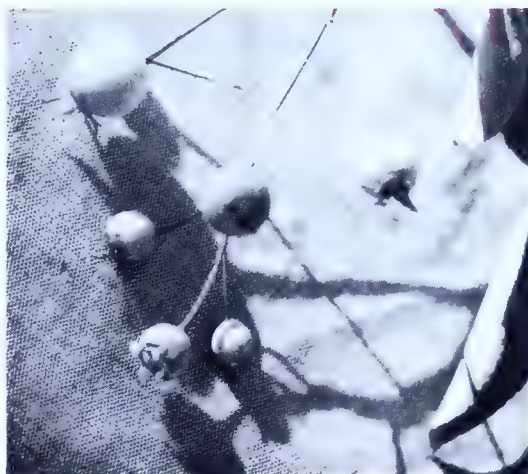


THE SERVICEBERRY'S white blossoms, left, seem to pop out overnight in the first warm days of spring. The fruit, below, attracts as many as 50 species of birds and a variety of mammals, including man.

tree, the native serviceberry has attracted a host of admirers for centuries, both among animals and man. Its delicious, fleshy fruit, ripening in June and July, is a reddish or purple berry, a sphere of some 0.3 inches in diameter, a fleshy pulp containing numerous small seeds.

Indians gathered the serviceberry (both tree and shrub forms bear fruit), dried the fruit and used it in flavorings and pemmican. The flavor is sweet, not unlike the blueberry or huckleberry, and about the same size. The fruit attracts as many as 50 species of birds, particularly the cardinal, bluebird, flicker, robin, cedar waxwing and tanager. It is a favorite target for bears and raccoons and other fruit-eating mammals. In bear country, it is common to see the smaller trees or branches broken and ripped by impatient bears, especially those too large for the tree to support.

Its attractive spring blossom is supplemented by a rounded crown shape which produces a full growth of delicate ovate leaves which in autumn turn reddish-orange or bright gold, depending on soil conditions. Its combinations of attractive spring show, satiny gray bark, fall color, fruit and shape have made the serviceberry a favorite landscaping choice. There are several in Williamsburg, Virginia, one attractive specimen on Gloucester Street, across from Brunton Chapel. George Washington planted 20 serviceberry trees at Mount Vernon. One of them, a replacement for one of the originals, grows now at the



south end of Mount Vernon's veranda. Its attractive attributes have made it a popular landscape tree in parks, estates, golf courses, arboretums and in suburban yards and gardens.

Landscape architects and designers who have learned the value of using native trees, shrubs and wildflowers, often use the serviceberry for drives, wooded edges and understory, or in dramatic rock formations to soften the lines of the landscape, add color and establish a natural appearance. Its moderate size and symmetry make it ideal for golf courses, estate planting and in combination with redbud, flowering dogwood, cherry and thornapple, a succession of colorful, changing blossom shows can be achieved through April and May.

The flowers are a brilliant white, arranged in drooping racemes three to five inches in length. You'll see the early bees and flies working the blossoms, especially on warm days. This blossom



**FROM A distance the flowers almost resemble popcorn, puffs of white contrasted against the grays and browns of the spring forest. You'll see the early bees and flies working the blossoms, especially on warm days.**

and burials that had been put off in winter. The appearance of the serviceberry bloom signaled this welcome time. "Sarvis" is just a colloquial form of the word service.

The name shadbush is connected with another spring occurrence, the return of the shad to the eastern coastal rivers from the sea, responding to some miracle of nature's bidding to return to the same site where the fish were spawned. The blossoming of the *Amelanchier* often coincided with the migration of the shad, another joyous and economically important springtime event for fishermen and settlers along the rivers.

Because of widespread transplantation from the wild and its cultivation in nurseries, the *Amelanchier* is found now in parks, home landscapes, and gardens all over the country, in several specific forms. *A. laevis* grows to a trunk thickness of one to one and a half inches, has a delicately rounded crown and reddish-purple edible fruit. The downy serviceberry, *A. arborea*, is listed in some tree books as having dry and tasteless fruit, with leaves larger than ordinary and wooly on the bottom surface. *A. florida* has oval leaves and a juicy fruit which is more blue than purple.

Even the dry fruit varieties are attractive to birds, and all the berry-eating types, especially wild turkey, and grouse, seem to be attracted by the fleshy fruit. Its appearance in the summer woods has been a boon to wandering farm boys, hunters, trout fishermen and mountain dwellers. Anyone who has enjoyed a serviceberry pie or cobbler will attest to its flavor and juiciness. Here are some ways to try it for yourself.

### SERVICEBERRY PIE

Crust for 10-inch pie:

Mix  $2\frac{2}{3}$  cups flour with one teaspoon salt in bowl. Cut in shortening until dough is thoroughly mixed and crumbly. Add seven

is the source of several of its names. The "service" of serviceberry is derived from the church services held in the early days of the backwoods settlements. These first services of the year were joyous occasions when spring ended the winter's isolation endured by the farmers and pioneers settlers in the remote mountain regions of the state. At these services the travelling circuit preacher, or one of the community, would preside at weddings, baptisms

Note: My special thanks for the critical and scientific eye of Dr. John F. Lewis, "Botany John", whose knowledge of the flora of Pennsylvania is legendary. He comments, "The two most common species in Pennsylvania are *A. arborea* (Michx.f.) Fern., and *A. laevis* Wieg. The *arborea* is more widely spread where *laevis* tends to occur in the highlands as far south as Georgia. The fruit of *arborea* is generally described as insipid, but that of *laevis* is sweet. I have eaten fruits of *laevis* in Jefferson County and Somerset County that were delicious."



to eight tablespoons cold water, one at a time, until dough is moistened. Work dough into two equal balls, flatten and roll dough with stocking covered and floured rolling pin. Roll from center outward to get an even crust larger than the inverted pie tin. Fold dough in quarters and unfold in pie pan. Roll out top crust in same manner.

Mix five cups of serviceberries, washed and drained, with  $\frac{2}{3}$  cup of sugar and  $\frac{2}{3}$  cup flour. Pour filling into pie pan, sprinkle with two tablespoons lemon juice and dot with three tablespoons butter or margarine. Cover with top crust. Trim crust, but leave enough to fold lower over upper, then crimp with thumb or fork. Punch fork holes in top crust for steam release. Bake in preheated oven at 425 degrees for 35 minutes, with sheet of foil over top crust to avoid excessive browning. Remove foil, bake another ten to fifteen minutes or until top crust is brown and filling is bubbling nicely. Serve warm in deep dish with cream or ala mode.

### DUTCH OVEN COBBLER

If you are camping where serviceberries are ripe and available, mix five

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For a Friend . . .

cups of berries with a cup of sugar, lemon juice and butter and flour as above. Pour the filling into a warm Dutch oven. Make one crust and fit it tightly, crimping the crust against the oven sides. Punch steam holes. Cover with lid, set oven in hardwood coals, add more coals to lid and bake until crust is deep brown, about 50 to 55 minutes.

You can have serviceberry desserts in winter if you can the fruit, following standard canning recipes for blueberries or blackberries. For a winter camp treat try a serviceberry cobbler with snow ice cream made with a basic milk, sugar, vanilla custard recipe, or milk with a prepared pudding mix. Stir in fluffy snow until you have a sherbet consistency.

## GAMEcooking Tips

### Sourdough and Stew — 1980s Style

Sourdough sustained the courageous settlers who traveled West in wagon trains, nourished cowboys on the trail, and probably saved many lives, if the truth be known. Throughout our pioneering history cooks guarded their jars of yeasty starter with as much enthusiasm as some people guard their money. Modern cooks still use and enjoy sourdough in breads and pancakes, but here's a new way to enjoy its hearty properties—in cakes. Served after a spicy venison stew, a sourdough cake makes a meal that sticks to your ribs.

#### Sourdough Banana Cake

- $\frac{1}{2}$  cup margarine
- 1 cup brown sugar
- 1 egg
- 1 cup mashed banana
- 1 cup sourdough starter

- 2 cups flour
- 1 teaspoon salt
- $\frac{1}{2}$  teaspoon baking soda
- 1 teaspoon vanilla
- $\frac{1}{2}$  cup chopped walnuts

Cream together the margarine and brown sugar. Add the egg and beat until combines. Add the banana and sourdough starter. Sift together the flour, baking powder, salt and baking soda. Add to the batter and combine thoroughly. Add the nuts and mix just until blended. Spoon into well greased and floured loaf cake pan 5 x 9 x 2 $\frac{1}{2}$  inches. Bake in preheated oven at 350 degrees for about 1 hour, or until tester comes out clean.

—FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY

# Ringin' Out the Old

By Joel M. Vance

CLETE CAUGHT me stealing walnuts off his back pasture tree. I was stuffing them—most still in the green hull, but a few turned black-brown—into a tow sack when his shadow fell over me. Scared the wits out of me.

"What you think you're doin', boy?" he growled.

"I didn't think you'd mind," I stutted, my voice as quavery as one of the old Vernon Dalhart records my Grandma used to play. "I mean, I didn't know they belonged to you."

"You knew they didn't belong to you," Clete said flatly.

"Yessir," I said, ashamed. "My daddy taught me not to trespass and always to ask permission, but I don't always do what my daddy says. I'm sorry, sir."

There was an agonizingly long silence while I studied the toes of my boots as if I'd never seen them before. When I finally looked up, the old man had a kink at the corner of his mouth that looked like a smile, and I knew everything was going to be all right. Not that I'd conned him, but I found out he was nothing but a kid himself in an old man's body.

"You can have them walnuts," Clete said. "If you're gonna take them home and crack them out yourself and pick the meats and make some cookies for your folks and me. But if you plan to sell them, you can drop them right there and get off my place."

We made a pair for about a year. I was 15 when we met and born a hundred years too late. I was born to see what lay beyond the Where-You-Can-See. Once I ran a trapline all winter, got frostbite, and made all of five dollars when the bottom dropped out of long-haired furs.

But it didn't matter because I was where the wind blew free and life fed eagerly on death. I didn't think of it that

way, but that's the way it was. I was life and I was in control. I killed, but wasn't killed. I was 15 and eternal.

I started hanging out at Clete's place every chance I got. He had a small disability check for an old war wound that made him gimp some when the weather was bad, but mostly he lived off the land, out of a trim garden that went with his trim house.

There was a sense of pride at Clete's. He didn't have much, but what little he had was kept up. Summer came, and with it droning heat and old-dog laziness. We fished in the evenings until the mosquitoes got too bad. He took me into the Big Woods where there was a tree-shaded little lake and we hauled in enough bluegills bigger than Clete's square, knotty hand to have a grand fish fry.

"Now I'm gonna teach you how to fix fish," he announced. "You better learn. You're too dern ugly for any woman, so you better learn how to take care of yourself."

Clete basted the bluegill fillets in a marinade of lemon juice and butter, sprinkled them with lemon pepper, and grilled them. We had sweet corn that I picked while he was filleting the fish. We roasted the ears in their own husks.

Clete whomped up a terrific salad, garnished with mushrooms he grew in his own cellar, sprinkled it with some raunchy cheese that smelled terrible, tasted wonderful.

"You deer hunt, boy?" he asked.

"Would if I had a gun," I said. "My dad said he might let me go this fall."

"Your daddy care if you hang around here?" he asked.

"Naah," I said. "They told him you were okay. I think he's kind of glad somebody's looking after me. He's busy making a living."





"That's too busy," Clete said. He looked narrowly at me. "I ain't your daddy, understand. Don't make no mistakes about that."

"You don't have to get mad about it."

"I ain't mad. Just don't make no mistakes. You ain't got but one daddy."

It was the best meal I ever ate and I raved about it at home. "He's the best cook I ever saw!" And I realized that would hurt my mother's feelings and added hastily, "Next to you . . ."

### 16th Birthday

The deer rifle came on my 16th birthday. It was a used lever-action Model 94, everybody's deer rifle. It had a four-power scope and a soft leather case.

My dad intended to help me sight it in, but had to leave town on business, so I took the rifle to Clete. He checked it over expertly, squinted down the barrel. "Used, but not hard. Your daddy got you a good gun here. Oughta wait till he comes back and helps you sight it in."

"He doesn't care. He said so. Geez, I can't wait. I'll bust!"

So we sighted the rifle until it shot a group at 80 yards that you could cover with a silver dollar.



"Got something for you," Clete said later. "For your birthday. Ain't much, but it ought keep you from fallin' down, clumsy as you are."

He handed me a cedar heart walking stick, a lovely, rich-red staff that reached to my shoulders. He had painstakingly scraped and cut the sapwood off until the knurls and curves of the heart were all that remained. He'd smoothed it to a satin finish and oil-finished it.

September fed into October and the hickories around Clete's cabin went gold, then shed their leaves. We caught a few squirrels working over the nuts and Clete fixed squirrel stew. I was driving now and came home late, full of squirrel stew and black, strong coffee that kept me awake far into the night.

We scouted the Big Woods and Clete read deer sign, interpreting it for me like someone leading the blind. "See, here's a pawed-up spot where an old buck is lookin' for a young one to whip."

We found rubs where bucks had jousting with saplings and gradually worked out a pattern to it all — there was at least one big buck and probably a couple of smaller ones. Once we surprised a couple of does and watched as they bounded away, flags bright in the gray woods.

Another time we glimpsed the big buck as he whirled and vanished and, for an eyeblink, his antlers were frozen against a dark cedar. I carried that picture to bed each night as October dwindled and the weather grew colder.

The maples flamed and died and then the oaks turned red and the forest was darker, red and the green of pine and cedar. The brighter trees long since had given up their artwork to the thieving wind.

Clete kept a fire going in the stove. Once, when we were splitting and stacking firewood, a gaggle of snow geese went past high above. Their unceasing

**We scouted the Big Woods and Clete read deer sign, interpreting it for me like someone leading the blind. "See, here's a pawed-up spot where an old buck is lookin' for a young one to whip."**



lament drifted down on us like the falling leaves. Clete shuddered. "Goin' south," he said. "Warm down there, like life. Cold up here. Like death." He rubbed his hands on his overalls and picked up the maul.

Clete and I were working on a portable deer stand a week before the season. He'd told me to get an old auto seat belt that we'd use to fasten the platform to a tree. I bought one at the junkyard for a couple of bucks. I couldn't get to sleep that night and heard another flock of geese, faintly through the window glass.

Even before I pushed open the cabin door, I knew there was no one home. No smoke from the chimney. It didn't make sense. Even if he were out on his trapline, he'd have stoked the stove. The dishrag was dry and there were no dirty dishes. He hadn't eaten breakfast.

There were fresh tire tracks coming and going in the lane. The nearest neighbor was a mile back down the gravel toward the blacktop. I stopped and knocked. "Come in, boy," said the woman at the door, whom I knew slightly. "You're Clete's young friend, aren't you?"

I didn't know what, but I knew it was bad. "I'm so sorry, son," she said, her kind face worn to gentle, soft surfaces. "Clete's been taken to the hospital. They think he had a stroke."

It was inconceivable. Clete was like one of the big oaks in his yard, indestructible, a granite man. If he was dying, I was dying.

I was terrified.

"You should go see him," my mother said. "He's your friend." But I couldn't. And I couldn't explain why. It just seemed that some things shouldn't end, that some legends shouldn't die.

I walked back and forth past a phone booth a dozen times before I got up enough courage to call the hospital. I asked about him. "Mr. Turner is in stable condition," said a crisp voice. "Are you a relative?"

"I'm a good friend," I said, realizing the shame that hid there.

"Well, you should come and see him,"

she said severely. "He's very lonesome."

"I will," I promised. "I'll come and see him."

But I didn't. Once I got as far as the hospital and the big building frightened me. I was breathless with panic and when an ambulance squealed up the driveway and an emergency team frantically burst from the building, tending a stretcher inside, I bit at my lip in fright and left.

"Have you been to see your friend?" my father asked that night.

### "No Sir"

"No sir," I said, ashamed.

"Have you called or sent a note?"

I shook my head, my eyes hot with tears. "You have to," he said. "You owe it to him."

The next day was cold, dark and gray, with flecks of snow. The next day was the deer opener and it looked as if there'd be a tracking snow on the ground. Clete had told me that was the sport at its best, to follow a track and anticipate what the deer was going to do.

A nurse looked inquiringly at me.



### Question

If I kill a spring turkey but have already used the two harvest cards supplied with my license, do I have to send in a report on the spring turkey?

### Answer

Yes. Within ten days of killing the gobbler, you must mail to the Harrisburg headquarters a post card with your name and address, license back tag number (include letter) and the date, county and zone of kill.



"I'm here to see Clete Turner," I said. I caught the quick shift of her expression, then she was impassive again.

"Mr. Turner has had a serious setback," she said. "Are you his young friend?"

"How . . . what happened?" I whispered, my throat gone dry.

"He had another stroke," she said. "Last night. I'm afraid it's a very serious one."

"Oh."

I didn't know what to say, other than a stupid, insufficient, "Oh." I turned to leave and she caught my arm.

"Why don't you go in and see him for just a moment?" Fear grabbed at my heart.

She held me. "He talked about you. You mean a lot to him and he wondered why you didn't come to see him."

I wanted to run. I stared at the floor and she told me the room number and

I THINK there was an almost imperceptible squeeze. Maybe it wasn't even there. Maybe it was only a reflexive response from his damaged brain that had nothing to do with what I said or what I felt. But maybe not.

shoved me slightly. I walked slowly down the hall and pushed the door open.

He lay terribly still in a high bed, partially propped up, looking small, shrunken. I tried not to look at the lifelines that had taken over conduct of his body.

He showed no sign he knew I was there. His eyes were open, but stared at the ceiling. It was Clete, but an artist's failed rendition, without life, color, richness.

"Clete?" I said. "It's me."

There was no reaction. "Hey, Clete, I'll take care of everything out at the place, okay?"

Nothing. He lay still, alone, and dying. Suddenly he wasn't the unknown anymore, but the known—terrible knowledge, but the knowing of it draining the terror.

I took his hand, held it as if I could somehow let some of my own vitality flow into him.

"Hey, Clete, this is no way to start the deer season, you hear?" I scolded, my voice thick with love and tears. "I'm gonna go out in the Big Woods tomorrow and get that big buck, okay? And when you get back to the cabin, I'll have those ol' antlers right over the table where you got that ugly picture of the waterfall."

I held his hand and waited.

I think there was an almost imperceptible squeeze. Maybe it wasn't even there. Maybe it was only a reflexive response from his damaged brain that had nothing to do with what I said or what I felt.

But maybe not.





**SISTERS** Nancy Shearer, the author, Diane Branthoover and Peggy Ahlborn have logged a lot of miles, dogged through briars and brambles, and put up with the worst weather imaginable, hunting whitetails together.

## Just Us Girls

By Carol L. Sipos

**T**HERE'S NOTHING like being in the right place at the right time. With a little luck tossed in for good measure, I watched the action unfold as my sister Nancy scored on her deer last year. We sisters usually hunt separately, yet in the same general area, but it was the first time I was able to watch such drama take place before us.

Buck season was over and none of us girls had filled a tag. We were planning to hunt antlerless deer together, along a nearby creek bottom. We had hunted the area many times over the years and know the territory well. From the crab apple thickets and old overgrown powerlines to the stretches of high grassy cover that are natural deer runways along the creek, we each have our favorite spots to hunt.

As previously arranged, I accompanied my sister-in-law Edna Sipos to a perfect post. It was just inside the edge

of a little strip of cover that afforded a good view of the grassy bottom along the creek. We slipped into the area early in the morning and took our positions.

My sisters, Nancy Shearer and Peggy Ahlborn, had chosen to post in separate positions up on an old power line. If none of us had any luck by noon, we had decided to meet and plan a few hunting strategies for the remainder of the day.

### Time To Move

Edna and I posted all morning without seeing any deer. In the distance, I saw Nancy and Peggy approaching along a tram road that led towards the creek bottom. I signaled Edna that it was time to move on, and we went up to join my sisters. Once together we began to quietly discuss our plans, but then I heard the distinct sound of snapping and crackling. "Listen," I said, "it sounds like deer coming down off the ridge."



**DIANE BRANTHOOVER** was the first of the group to get a buck, a fine 6-point she cleanly dropped with a 300 Winchester Magnum. The tough part was dragging him topside.

my sisters and received congratulations as well, on quite a few deer that included some very nice bucks. But this time, after watching the entire proceedings, the congratulations given in the field were much sweeter.

Every hunter has those special moments afield that they wouldn't trade for a brand new rifle (complete with optics) and a guarantee of a clear shot at the "Ole Bighead" of the territory. I had just added one such moment to a wealth of memories gained from years of hunting with the best group of hunting buddies I could ever ask for.

My sisters and I grew up in a family of hunters to whom the first day of buck season was an organized ritual. By the time we were of hunting age, each of us had been thoroughly schooled in gun safety and handling. We knew how various firearms functioned and just how to use them.

On trips to the shooting range it was a matter of luck and timing to see which girl had the chance to tag along. We'd loiter in the kitchen as gear was organized and usually one of us gals would receive a nod of invitation to go along and shoot.

We worked the same strategy, with less success, in our bids to go hunting. One major problem we faced was that the cost of providing each of us girls with her own rifle was out of the question. In a family of ten children, we had to work for the privilege and luxury of our own firearms.

It wasn't easy to save up the money to buy our first Winchester 30-30s, but we each did it. One by one, we joined the ranks of Pennsylvania deer hunters. As the years went by, we each progressed to other firearms, and the 30-30s are being passed down to our youngsters.

Nancy and Peggy were the first to purchase their Winchesters. Nancy followed through by obtaining a license for the coming season. Because she had all

The light hillside above us was covered by snaggly blowdowns and crab apple trees, and in the distance we saw approaching patches of brown. We all froze.

I was sitting against a tree and Nancy was standing in front. She whispered, "Five does, heading for the bottom." Peggy was standing to Nancy's right and Edna was slightly behind her. Nancy breathed, "As soon as they make it to another opening, I'll shoot."

We all remained motionless as the deer continued toward the opening. When they cleared the thicket, Nancy was ready. Peggy, Edna, and I remained still and watched Nancy in action.

Calm and collected, Nancy fired one well placed shot from her Winchester 30-06 and we knew the deer was hers. Peggy accompanied Nancy to help locate and tag her deer. Edna and I joined them shortly. It was a great shot, and we all congratulated her.

Through the years I've congratulated



the basic necessities, I accompanied her for the experience of actual hunting.

It was 17 years ago when we crossed a snowy cornfield on what would be the first of countless hunts together. We stayed out all day and we both enjoyed the companionship as well as the hunt. We saw a few does, no bucks at all, but it had been a great day.

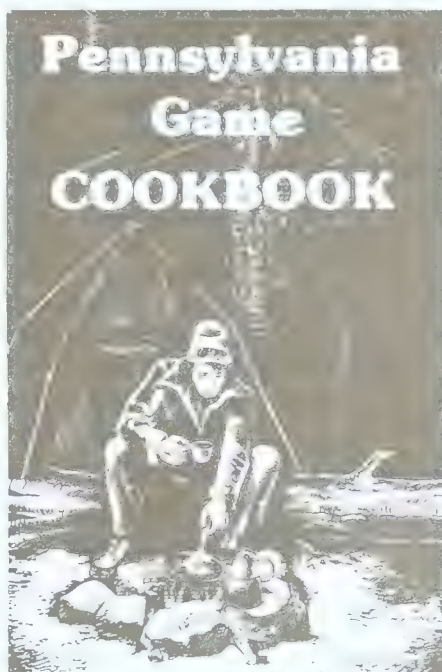
Two other sisters, Peggy Ahlborn and Diane Branthoover, have since joined us in the field, and we've been hunting together for many years since. Diane was the first of our group to take a buck, a fine six-point.

I can still recall how excited and proud she was as she related her story of success. Early in the morning on an opening day of buck season, Diane was posted on top of a steep wooded ridge. From her vantage point she could watch the bottom lands that extended along the creek. The thick cover along the edges were natural travel ways for deer. With other thick patches of cover and a few hunters in the area, anything they pushed out would likely pass through her area.

Diane had selected her stand well in advance of the season and it proved to be a good choice. She had taken doe before, with other guns, but for this buck season she'd selected a Winchester 300 Magnum. With a Weaver 3-9x scope, she was all set for the arrival of a buck.

Her trophy came trotting down the little gully at the base of the steep hillside. "I knew a deer had to be coming my way because I heard it and caught a few quick glimpses of it as he approached," she explained. "Then, he came running right in front of me. As soon as I saw the rack I knew the 300 would do the job. It was a quick clean job of putting him down. The really rough part was getting down over the steep hill to claim him, and I still hate to think about the task it was dragging him topside so I could get him out of the woods."

We girls learn more about deer hunting and gain new methods and strategies for hunting together with each



**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by GAME NEWS readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from GAME NEWS office.

passing year. The first year I hunted I felt that success was simply a matter of being in the right spot. I had carefully picked my location before the season and faithfully spent every hunting hour of buck season waiting. I sat on the side of a small hill and posted diligently through wind, snow, rain and sleet. I had every hope that the next few minutes would surely bring a buck into my range.

I continued to sit patiently while all around me other hunters were taking bucks I knew were in the area. I had so much faith in my stand that I was there during doe season as well. Patience eventually paid off.

The last 45 minutes of the last day of doe season found me still on stand, still

waiting. I heard the deer approaching before I saw them coming past my spot. I picked one doe, aimed my 30-30 and shot. The deer kept going. As it leaped over a log pile I took careful aim, remembered to lead slightly, and placed another shot. I watched as it crumpled, got up and went a little farther.

I ran down from the hill I'd been sitting on and followed up on my deer. About 70 yards into the grapevines, I found it. My first shot had missed, but the second shot had been well placed. It was a good lesson learned very early in my hunting experience. Patience is an asset, accuracy is a necessity.

### **Cold, Wet and Miserable**

A few buck seasons ago, Diane and I stopped to discuss our plans for the remainder of the day. It had been a cold, wet and miserable morning. We met on an old log cut and tried to decide whether to finish out the day in the rain or try a fresh start in the morning. As we stood there talking quietly and discussing our options, we both said at exactly the same time, "Look at that deer!" A soggy looking doe, less than 20 feet from us, jumped up from her bed and high-tailed her way out of sight. We were quite surprised that neither one of us had noticed her on our approach to the area or while we had been talking.

Everything we've learned about deer has been put to use in our hunting methods at one time or another. To move deer, you sometimes have to practically step on their tails. This past season we weren't seeing any deer. We knew they were around, but with the excellent cover, they just wouldn't move.

After looking the area over closely, I suggested, "Let's put on a few small drives through these strips of cover. Nancy and I will do the pushing and let's have Peggy on the side away from the creek. She'll be able to watch for anything that cuts out the other side." We decided to have Diane circle up ahead very quietly and position herself on a hill that overlooked the area. She had an overall view and a chance at any deer that moved ahead of the drivers.

Once everyone was in position, Nancy and I started at a steady pace through the strips of cover. Peggy flanked us and sure enough three deer came out in front of her. She wasn't quick enough to connect, but our strategy had worked. We knew the area well, knew how the deer would react, and planned our small drives with safety in mind. The real beauty of it all, however, was in having hunting partners who work well together and share the hunt.

My hunting buddies and I can laugh, finally, about the day we were hunting on the ridge. I had hunted there the day before and pushed a nice buck out but got no chance to shoot. We decided we'd give the ridge a try the next morning.

As we approached the area, the eight-point gave us a surprise by crossing right in front of us before we expected it. We just let him go. Each sister had given the courtesy of the shot to the other, and not one of us took up the offer. By the time we realized we could have shot, the buck was long gone—and still quite healthy!

As dedicated as we all are to enjoying the outdoors and spending hunting time together, I haven't yet convinced my sisters to join me in the challenge of flintlock season. I am making a little progress though, because Diane has finished her own Thompson/Center 50-caliber Hawkins. Her interest has really perked up and is headed strongly in the black powder direction, maybe because I've spent several seasons with my own Hawkins and took a very nice deer with it.

I had been going out every day of muzzleloader season, but on one particular morning I didn't have a vehicle. My husband Dan had taken my car early in the morning to have some work done on it. So, after I debated with myself whether I should walk to my hunting area, which left me no way of getting a deer home if I did get one, I decided to go anyway.

My late start didn't get me into the woods until about eight o'clock. After the long walk to get there, I decided to take a break and just watch for a while.



With no other hunters about, I figured the deer were probably bedded. I decided to stillhunt. I covered the territory I wanted to hunt and slowly headed back to where I had started.

In the meantime, my husband had returned and decided to join me in the woods. I saw him in the distance and motioned to him that I wanted him to circle out around and possibly get some deer moving.

Within 15 minutes I saw three deer run up over the crest of a little hill. They were about 60 yards out in front of me and scrambling to stay tight to cover. I chose the lead deer, took my time, and carefully placed my sights just in front of the running deer. I squeezed the set trigger, took a deep breath and fired. When the smoke cleared I saw the deer was down. I reloaded the Hawkin and headed for the deer, reaching it about the same time that Dan did. When I saw that it had been a good clean shot, I gave a loud victory whoop like the early settlers must have done on occasion. It was a long season in which I'd put in countless hours, but I really enjoyed them all. I had taken deer before, but my muzzle-loader deer was the only one I've ever spontaneously shouted about. It had all come together; the work, the challenge of a flintlock, and the knowledge of hunting white-tailed deer.

When I first thought of writing this article, I asked my sisters what they each thought about sharing our hunts with one another. There were, of course, a few comments about how much fun it is to tease one another about the way one of us usually gets caught. It happens

every season, one of us gets caught standing with a silly grin on her face as deer run past with their white flags waving high.

The serious comments that we reflected on sums it up for many other Pennsylvania sportsmen and women. Dedication. We're out there every day, as often as we can, to enjoy the hunt. No matter what the weather, we'll dog through the briars and brambles to help each other.

We walk miles, up, down, around, and through some of the best hunting territories, and it's always enjoyable.

Respect. For the white-tailed deer we hunt, for each other and our strengths and skill, and for other hunters who share the sport and territory with us.

Companionship. To set aside part of the hunt to meet and share lunch. To take the time to help a successful hunter drag his deer to an easier access spot or to the next willing helper. The enjoyment of hours spent in conversation, reliving past hunts and planning for the seasons ahead.

We enjoy each trip out, and if one of us can't be there, she'll know where we'll be and can easily find us to share in the day's events. It just wouldn't be hunting season without everyone being there to share such memorable times.

Such thoughts and feelings are in the hearts of many hunters who share the passing seasons with companions. I want to say, "Thanks sisters, for sharing the best of times with me. It's been wonderful, and I'll meet you down by the lower pond for lunch on the first day of buck season."

## Cover Painting by Gerry Putt

Pintails are considered among the most beautiful birds and they're especially popular among hunters. But pintails have declined in recent years, more than any other species of waterfowl. Pintails nest earlier than most other ducks, and they prefer to nest in grasslands, along shallow ponds, which are the areas most severely affected by droughts. To help restore pintails, Ducks Unlimited has launched a new program, called SPRIG, in which all information known about the species is being compiled, and then habitat development projects will be implemented. For more information contact your local DU chapter.



**MOST WOMEN** have a good eye for comfort and they're as crazy about this sport as you are. If you don't over do it, you'll be able to get their help year after year.

# STUMP HUNTING

By Robert C. Gaffron

**I**N SOMERSET COUNTY it's not at all uncommon to be standing around discussing hunting. Talk usually centers around where you hunt, what you hunt, and what kind of gun you use. I usually fit right in, until we begin discussing what we hunt. Someone will ask, "What do you hunt?" and I'll reply, "Oh, I'm a stump hunter."

"Pardon me?"

"I said, I'm a stump hunter."

At that point most people usually excuse themselves and move away; some just change the subject. Others just look at me sort of strange and say, "have you had the problem long."

Stump hunting is just not as popular as it once was. I blame the Game Commission for this. More realistic limits and later starting times would have made the sport more popular. Why I can remember years ago when on the first day of deer season you couldn't find a stump to park on. Unless a person got out there early, every stump had a red clad figure perched on it.

Deer season was not the only time stumps were at a premium. Turkey season, especially spring gobbler, put added stress on the resource. There were even squirrel, fox and rabbit hunters who parked their bottoms on stumps and played the waiting game.

The devotion to the sport is easy to understand. This is because stump hunting is different than most other forms of hunting. You can stump hunt while engaged in other pursuits, such as grouse missing or deer spooking, and it's something you can get the whole family involved in.

Most women have a good eye for comfort. Take them along in the fall. Tell them you're going out to look at the foliage. Usually, after a couple hours of walking, they'll just naturally be attracted to a stump and then start to say things like, "Where's the car?" or "Are we lost?" Don't let the act fool you. They're as crazy about this sport as you are, if you don't over do it, you'll be able to get their help year after year.



**WHILE** it's true a body can occupy only one stump at a time, I generally try to have three stumps available for the first day of deer season.

As you become better and better at finding stumps, people will just naturally begin asking your opinion on the best stumps to use. To consistently pick out the right stump you've got to have good eyesite, but more importantly, you must also have a good "feel." Some stumps are better than others, and not just any old stump will do. Old chestnut stumps were great in their day, but with the passing of time, their tops now cause too many splinters and hold too much water.

Ideally, a stump should be about 18 inches high and have a diameter about 6 inches wider than yours—at the point of contact. This allows for what we call the "wobble factor." Sometimes it's difficult to find the perfect stump, and some people try to make their own. Caution! You must have written permission of the landowner before creating your own stump. Besides, making your own takes away from the spirit of the hunt. When using a stump some people brush away all the leaves from around it. This prevents excess noise when standing to stretch. That's perfectly legal, however; be sure to put the leaves back. If you don't, you may find someone else on your stump when you return. Although stump jumping is not very sporting, it is not illegal and it does occur.

It is also helpful to have a large number of deer, turkey or squirrel in the area. They help break up the monotony of long hours on a stump. In fact, I know some people who use this criteria for choosing a stump.

You may be wondering how many



stumps a person may harvest in a year. While it is true a body can occupy only one stump at a time, I generally try to have three stumps available for the first day of deer season. This is because with all the noise of the first day, I sometimes have to move to avoid being run over by a buck.

Finally, in all honesty, I have to report that stump hunting, while not enjoying the popularity it once had, is beginning to catch on again. In recent years companies have begun to build artificial stumps that you can carry in and set up almost anywhere. Some of these have fancy straps, pockets, cushions and come in fluorescent orange or camo. I personally have several of these, but frankly, I prefer the real thing. There is something about hunkering down on a stump you've tracked down yourself. I guess you could call it tree-mendously satisfying. So remember, the next time someone says he's a stump hunter, don't run away or change the subject, just hunker down and swap stump stories.

## **WOODWORKING for WILDLIFE: Homes for Birds and Mammals**

The Pennsylvania Wild Resource Conservation Fund (income tax checkoff fund) and the Game Commission have produced a 60-page booklet full of detailed plans and related information for people interested in building and erecting wildlife nesting devices. From bluebirds, screech owls and ospreys to raccoons, squirrels and even turtles, easy to follow directions for building 22 proven homes and other devices for wildlife are provided. Order *Woodworking for Wildlife* from the Game Commission, Department AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Price is \$3 each, delivered.

# BE SAFE

## Turkey Hunting Safety Alert Band

Most turkey hunting accidents are caused by shooters failing to properly identify their targets. Turkey hunters are usually clad in camouflage, and they deliberately imitate turkey sounds; this makes them vulnerable to the careless or over-excited shooter.

To help make turkey hunting a little safer, with minimal interference to the hunt, the agency is offering a fluorescent orange safety alert band. Here are just a few suggested uses.



Wear band as  
a sash while  
moving through  
turkey woods.

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# BE SURE

## Turkey Hunting Tips

1. Eliminate the colors red, white and blue from clothing as these colors are found on mature turkey gobblers.
2. Display fluorescent orange while moving through the woods, calling, or carrying a bagged bird.
3. When calling, choose open woods for your stand and protect yourself by sitting against a large tree or stump.
4. Never stalk a turkey or turkey sound. The chance of being involved in an accident is increased.
5. Assume every sound or movement is another hunter. Be 100 percent certain your target is legal game and it is safe to shoot before pulling the trigger.
6. Hunt defensively and be on the alert for those who don't.
7. Alert approaching hunters by shouting "Stop!" Don't move, wave, or make turkey sounds.
8. Practice courtesy and self-control at all times while hunting. Good hunting habits prevent accidents.

EN



**Wrap It around  
a tree at your  
hunting or call-  
ing location.**



**Wrap it around  
a bagged bird  
while carrying  
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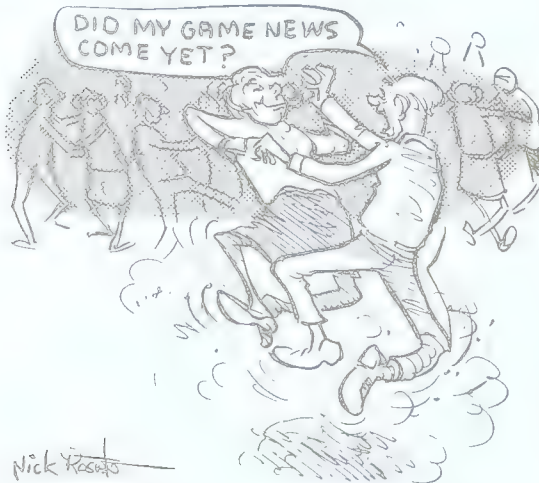


# FIELD NOTES



## Safety First

**TRAINING SCHOOL**—While on field assignment last fall I had the unfortunate experience of having to investigate two separate hunting accidents. Each incident involved a person being shot in mistake for a turkey. Now, with the spring turkey season fast approaching, the threat of such accidents are again with us. I wish to stress to all hunters: be sure of your target, be aware of other hunters in your area, and wear some fluorescent orange. By following these simple suggestions your hunt and my job will be much more enjoyable. — Trainee Michael G. Ondik.



## Huntin' & Dancin' & Readin'

**CLEARFIELD COUNTY**—I was checking hunters on SGL 93 the Saturday before buck season when I met Tom Metrovich, DuBois. Tom informed me that he was 75 years old and was scouting for his 59th deer season. When I told him that he had been hunting since before my father—who taught me to hunt—was even born, he said he's stayed young by taking his wife to polkas on Saturday nights and by reading **GAME NEWS**.—WCO Colleen M. Shannon, Luthersburg.

## Nothing New

**TRAINING SCHOOL**—I was reading *The Wilderness War*, Book 4 of Allan W. Eckert's *Narratives of America* series when I came upon what may be Pennsylvania's first recorded hunting accident. On November 5, 1742, Teho-wa, a Mohawk warrior, and two other men left Shenango for a deer hunt. Teho-wa hid near a trail while the other two swung around and tried to push deer back toward him. Soon after they split up, however, Teho-wa moved to another stand about 100 yards away. On their drive, one of the men saw movement in the bushes and shot. The arrow hit Teho-wa in the head, killing him instantly. The need for hunter education has apparently been around for a long time. — Trainee David W. Donachy.

## Family Affair

**TRAINING SCHOOL**—After being cooped up all winter, many of us—especially kids—are anxious to get outside. A great activity is planting trees and shrubs. Any odd corner of your property can be turned into a little wildlife sanctuary, and it just so happens that the Game Commission sells seedling packets and a seed mix designed for developing wildlife habitat. For more information call, toll free, the region office in your area. — Trainee Keith Snyder.

## Crowded Skies

**SCHUYLKILL COUNTY**—Nobody needs to remind me that this county is along a major migration corridor for raptors. Every fall I handle many hawks injured from collisions with other objects. I think an air traffic control tower on Hawk Mountain would be a big help.—WCO John C. Shutkufski, Pottsville.



## One Strong Fellow

**TRAINING SCHOOL**—Last fall Bedford County WCO Dave Koppenhaver and I received a call about a bear being shot on the last day of the antlerless deer season. The snow on the ground plainly showed the bear tracks, and every 15 or 20 feet, a spot of blood. As we tracked it, however, something didn't seem quite right, and when we found a deer carcass, the story became obvious. The bear had been carrying the deer in its mouth, and it was deer blood we had seen, not bear blood. We were pleased with the outcome, and one thing's for sure—any bear that can carry a deer in its mouth, without leaving any drag marks, is bound to be one big trophy.—Trainee Jerry A. Bish.

## Spreading the Message

**BRADFORD COUNTY**—Bill Angove teaches at the Troy Middle School and is also a hunter-trapper education instructor. Last year, prior to deer season, Bill asked his students to come up with hunter safety slogans. The kids printed their slogans on tags and wore them around school for several days. If the students did that, then took their tags home and had their parents sign them, and then returned them to Bill, he gave each a prize—a SPORT folder. Bill had 105 students participate, making a lot of people aware of hunter safety.—WCO William A. Bower, Troy.

## Really Getting Around

**PHILADELPHIA COUNTY**—I think the agency's turkey management efforts may have become too successful. Last November wild turkeys were sighted at two locations in northeast Philadelphia, and we even caught one hen.—WCO Richard J. Shire, Philadelphia.

## Pennsylvania, That Is

**TRAINING SCHOOL**—I've come to the conclusion that I'm probably the only Game Commission officer who started field training in Washington and ended in Moscow.—Trainee Richard E. Karper.



## Patient

**JEFFERSON COUNTY**—Deputies Gene DeFoor and Randy Coleman were patrolling in deer season when they noticed an elderly hunter holding onto a tree beside the road. When they stopped and asked him if everything was okay, the man said he was just waiting for his buddy to catch up. The deputies could see pretty far down the road and nobody was in sight, but the gentleman insisted that his friend would be along. "He's 80 years old now, and can't keep up with me. I'm only 78."—WCO Donald G. Chaybin, Brookville.

## Hanging in There

**CRAWFORD COUNTY**—Despite a few setbacks, 1988 still turned out to be a banner year for the county's bald eagles. Three nests have been abandoned over the past three years because of human disturbance. Following the loss of their nestlings in 1987, because of a wind storm, one pair constructed a new nest last year and successfully fledged three young. Right afterwards, however, that nest was blown down. In the first eagle nest constructed outside of the Pymatuning-Conneaut Marsh area, two eaglets produced last year died from falling out of the nest. Finally, the county's largest nest was lost last fall, when it blew over. Undaunted, the pair immediately began building a new one. Despite all that adversity, eight eaglets fledged from the county last year, the most in recent history.—WCO Robert W. Criswell, Saegertown.

## Hardly

As many as 14 black bears were thought to be frequenting a refuse dump near Marienville. I, therefore, decided to spend the first couple of hours of bear season in the area. After hearing several shots I headed for some thick cover where several hunters were trying to locate a bear. On my way a lone hunter drifted up to me and said, "There's no bear here." When I asked what he meant he went on, "Didn't you see the Game Commission truck up the road? The game wardens came in here before daylight and drove all the bears away."—IES Robert MacWilliams, Sandy Lake.



## Snagged

Ever hear of a hunter using a fishing pole to get a deer? During the last buck season a hunter shot a deer near Lake Wilhelm, but the deer made it to the lake before it died. The water was too deep for wading, and no boat was near, so one fellow used a fishing pole and a large plug to hook and land the deer.—LMO James Deniker, Sandy Lake.

## Bargain Price, Too

**BEDFORD COUNTY**—When Jim Riley, East Freedom, returned home from hunting, his granddaughter came running out to greet him and exclaimed, "Grandpa, you didn't shoot this deer, the price tag's still in its ear."—WCO Jim Trombetto, Woodbury.

## Scientifically

**CENTRE COUNTY**—License sales are holding steady; it appears hunter pressure has dropped; there's more deer than ever in my district; and hunter success rates have improved considerably. I just wonder how the biologists equate all this.—WCO Jack Weaver, Bellefonte.

## Fatal Choice

**PERRY COUNTY**—Last fall a Shermansdale resident called about a large, hawk-like bird that appeared to be sick. Student officer John Morack and I found the bird and, with the aid of two foresters, we captured it. It was a mature golden eagle that, despite its distress, still had a most intimidating stare. We took the bird to a veterinarian/wild-life rehabilitator, who called the next day to report that the bird had been suffering from a throat full of porcupine quills. Although the eagle showed some improvement after the quills were removed, it died several days later.—WCO Leroy Everett, Newport.

## Third Time's the Charm

**CAMERON COUNTY**—Every year I answer dozens of inquiries from people wanting to know where to find a particular kind of animal. In nearly every instance, however, I never receive any feedback. Not long ago, though, I received a nice letter from Robert Row, Northumberland, that made answering all those letters worthwhile. Ralph wrote me back in 1982, asking where he might see some elk. I answered his letter and included a map, but offered no guarantees. Over the years Ralph made two trips but never saw any elk. Finally, last year, he spotted a spike bull in the area I had suggested six years earlier. He was tickled pink and credited my map for his success. Thanks, Ralph.—WCO Joe Carlos, Driftwood.

## Eager Partners

Nothing revives one's interest in hunting like a young boy or a new dog.—LMO Dick Belding, Waynesburg.





### Notnin' To It

**TIOGA COUNTY**—Edna Howland, who owns a farm outside of Westfield, has been a hunter for most of her 90 years. Last fall she was in her backyard when she saw a ringneck. Not sure if it was in season or not, she went inside, consulted the “Digest” she received with her hunting license, saw that pheasants were in season, and then promptly went out and shot her supper. — F.A. Bernstein, Middlebury Center.

### Stay At Home

**ELK COUNTY**—Last year, while hunters were back in the woods looking for bear, Johnsonburg Police Officer Ralph Tettis was watching three bears at a convenience store dumpster. I received complaints of bears in Ridgway Borough each night of bear season, and on the final day of bear season Deputy Rick Fisher found a bear sitting on his lawn, and another bear took an afternoon stroll through downtown Ridgway. — WCO Dick Bodenhorn, Ridgway.

### Big Insect Trap

**CAMBRIA COUNTY**—A building on SGL 108 is one big insect trap. Over 500 spider webs filled with trapped mosquitoes and other flying insects line the outside walls, and about 30 bats—comprising a mobile insect attack force—live inside. — WCO Lawrence A. Olsavsky, Colver.

### Not Many Lives Left

**POTTER COUNTY**—Art Deiner was trapping in the Leetonia area of Tioga County when he accidentally caught a bobcat. Art found the 25-pound feline waiting for him the next morning, high up in a tree. Art managed to release the animal, but only to have it run under his vehicle and crawl up on the transmission. After trying everything he could think of, Art drove 25 miles back to where he was staying, near Denton Hill, with the ‘cat still on the transmission. I was, to say the least, skeptical when Ralph Wentz called to say he had a fellow at his camp ground with a bobcat stuck in his truck, but I grabbed my trusty snare pole and went to the scene. Once there I got a noose around the bobcat’s paw and was able to pull it out from under the vehicle. At that point, though, the only place the cat wanted to go was after me. I took the cat over to a pile of garbage cans—where the animal could find shelter—and released it. After several minutes we chased it into the woods. We’ve all heard about a tiger in your tank, but that episode was ridiculous. — WCO Ron Clouser, Galeton.



### Rare Experience

**LUZERNE COUNTY**—Hank “Buster” Roberts, Hazelton, was hunting turkeys on the opening day when he had the pleasure of seeing two bobcats run by. — WCO Robert W. Nolf, Conyngham.



### Optimist

**VENANGO COUNTY**—"Rookie" Deputy Ralph Miller won't soon forget last year's hunting seasons. Like a kid before Christmas, Ralph was anxiously waiting for his uniform (uniforms for guys 6'7" aren't easy to come by). It finally came, though. Later, however, Ralph and his wife Wendy were awakened by smoke alarms and bellows of smoke coming from their living room. Ralph succeeded in putting out the fire before the fire trucks arrived. Undaunted, in his report of the incident, Ralph said that although he lost his entire living room to the fire, his uniform was rescued unscathed. —WCO Leo C. Yahner, Franklin.

### Long Wait

I was patrolling SGL 50 last October when, after 20 years as a wildlife conservation officer, I finally saw my first bobcat. —LMO Barry K. Ray, Rockwood.

### Hot Item

**ARMSTRONG COUNTY**—Not long ago I requisitioned supplies from the region office, and on the bottom of the form I added, "Needed: one new brain." Not to be outdone, Clerical Supervisor Irma Stouffer returned my requisition with the supplies requested, but on the bottom of the form, near where I had asked for the new gray matter, she wrote, "Sorry, out of stock. Supplies exhausted by Southwest Region Office staff." —WCO B.J. Seth, Worthington.

### But It's Done With Fish

**ADAMS COUNTY**—The bonus deer program almost took on a new meaning around here last fall. An individual unfamiliar with Penn State's deer study noticed several tagged deer on Gettysburg National Park. Later, after hearing of the bonus deer initiative, he jumped to the conclusion that the tagged deer were the "bonus" deer, and that anybody who shot one would receive a cash prize. I probably ruined his day by explaining the program and by reminding him that hunting isn't permitted on the battlefield. —WCO Larry Haynes, Gettysburg.

### Needed Assistance

I'd like to take this opportunity to thank all the wildlife students from Penn State's DuBois Campus for the work they performed at our bear check stations. The hours were long and the conditions less than ideal, but the guys and gals really did a great job. —LMO Jerry Becker, DuBois.

### Rejuvenating

**INDIANA COUNTY**—Last hunting season I had the pleasure of working with some of our trainees. Their enthusiasm to learn and do the job was a refreshing reminder of just how enjoyable this profession is. Thanks, guys, and good luck. —WCO Mel Schake, Indiana.

### Old Timers, Now

**ADAMS COUNTY**—Congratulations to the 20th Class of wildlife conservation officers. Nobody appreciates your graduation more than my classmates and I, for it marks the end of our three-year term as rookies. —WCO Mike Dubaich, Aspers.

### Don't Interfere

**TRAINING SCHOOL**—With so many species of wildlife starting to have young, now's the time to remember that even though it may seem the baby animals have been abandoned, chances are that mom's nearby. Do yourself and them a favor and leave them alone. —Trainee Richard Larnerd.



# Spring Gobbler Season Opens April 22

PENNSYLVANIA's 22nd annual spring gobbler hunt gets underway Saturday, April 22, and concludes May 20. Game Commission officials indicate current conditions are conducive to a good season; winter mortality was extremely low, and preliminary reports from field officers indicate plenty of birds are available.

Often, late March and early April warm weather produces early gobbling—when this happens, hunters should hear gobblers during the first week of the season—in contrast to other years, when weather conditions are such that birds start “talking” later in the season.

Wildlife managers designed the spring turkey season to provide maximum use of a renewable resource. By late April and early May, most birds have mated and gobblers can be harvested without jeopardizing future populations. Most states which have only one turkey season usually schedule it in the spring, rather than fall.

While any bearded bird is legal, many serious turkey hunters pass up shots at bearded hens.

Most gobblers have colorful red, white and blue heads, while hens have dull, slate-colored heads.

Game Commission safety officials, in



**LARRY SCARTOZZI, JR.** took this fine gobbler near his home in Susquehanna County. The bird weighed 16½ pounds and sported a 14½-inch beard.

a coordinated and concentrated effort with organized hunting groups, are putting special emphasis on turkey hunting safety. Hunter-Trapper Education Chief Jim Filkosky urges special care be taken during the spring season, because more hunters are shot in mistake for turkeys than any other game species.

## Must Have A Beard

“For a turkey to be legal in the spring season, it must have a beard,” Filkosky points out. “If the beard is clearly identified—as it should be—there is no possibility of anyone being shot in mistake for a spring gobbler,” he says.

Most turkey hunting accidents involve a shooter “stalking” the victim—believing he is “sneaking up” on a calling bird.



Filkosky warns that during the spring gobbler season it is unlawful to use a blind, dogs, drives, electronic callers or live turkeys as decoys, as well as rifles, revolvers or pistols. "The idea is for the hunter to call the turkey to him, not for the hunter to go to the bird," he emphasizes.

Dan Roessner, chairman of the hunter safety committee of the Pennsylvania Chapter of the National Wild Turkey Federation, who has been working with Game Commission personnel in an effort to reduce accidents, and Filkosky strongly suggest the following safety practices be observed while hunting this spring:

1. Wrap a daylight fluorescent orange band around the tree or hang the band or a fluorescent orange cap or vest from an overhead branch at the position where you are located, and wear fluorescent orange while going into and coming from the woods.

2. Never *stalk* a turkey. Chances of getting a shot are slim; accident chances are high.

3. Eliminate the colors red, white and blue from your clothing. All three colors are found on a mature turkey gobbler.

4. Never attempt to approach closer than 100 yards to a turkey. The bird's eyesight and hearing are too sharp to let you get within 100 yards.

5. Don't move, wave or make turkey sounds to alert another hunter. A quick move may draw fire. If necessary, yell "Stop!" to alert another hunter of your presence.

6. Be extremely careful when using

the gobbler call. It may attract other hunters.

7. Don't hide so well you can't see what's happening. Eliminating movement—not concealment—is the key to success.

8. Your calling position should have a solid background as wide as your shoulders, and have 180-degree visibility.

9. Camouflage hides you—it doesn't make you invisible. Sit perfectly still; turkeys and hunters both see even slight movement.

10. *Never* shoot at sound or movement. Be absolutely certain of your target before you pull the trigger.

11. Assume that every sound you hear is made by another hunter. Once you pull the trigger, you cannot call back the shot.

Hunters should be familiar with regulations governing spring gobbler season: turkeys must be bearded; they may be hunted one-half hour before sunrise until 11 a.m.; only shotguns or bow and broadhead arrows may be used; and if a hunter uses an over-under combination gun, single ball ammunition may not be in the hunter's possession.

Successful hunters must tag the turkey immediately after killing and before removing it from where it was killed. The tag supplied with the hunting license must be used. Persons not required to have a license may use a homemade tag showing the hunter's name, address, and the date, time and county of harvest. A turkey kill report card must be filled out and mailed to the Game Commission within ten days after killing the trophy.

## State Deer and Bear Scoring Program Slated for April

The Pennsylvania Game Commission will be conducting official deer and bear measuring sessions this coming April at our six region offices. Only deer and bear taken in Pennsylvania are eligible. Measurements will be taken by certified Boone & Crockett scorers and entered among the agency's official records. Scoring sessions will be held from 9 a.m. to 3 p.m. on: April 9 at the Northwest Region Office, three miles south of Franklin on Route 8; April 8 at the Southwest Region Office, 339 W. Main St., Ligonier; April 9 at the Northcentral Region Office, two miles south of Jersey Shore on Route 44; April 9 at the Southcentral Region Office, one mile west of Huntingdon on Route 22; April 8 at the Northeast Region Office, at the intersections of Routes 415 and 118, Dallas; and on April 23 at the Southeast Region Office, seven miles north of Reading, one mile off Route 222 on Snyder Road.



# Plantings for Wildlife

**T**HE GAME COMMISSION again is offering seedling packets and the agency's specially formulated seed mix for persons interested in providing food and cover for wildlife. The \$2 seedling packet contains 15 seedlings, three each of scotch pine, white spruce, American bittersweet, Asiatic crab apple, and Washington hawthorn. These trees and shrubs are grown at the agency's Howard nursery. The seed mix, a ten-pound bag of dwarf grain sorghum, millet, buckwheat and dwarf hybrid sunflower, is available for \$3. This is the same mix the Game Commission has been providing cooperators enrolled in our public access programs. Locations, dates and times of sales known at press time follow. Watch local newspapers for possible additional sale sites and times.

**ADAMS CO.** Gettysburg Square at old YWCA, April 21, noon to 4 p.m., and April 22, 9 a.m. to noon; **BLAIR CO.** Logan Valley Mall, April 23, 10 a.m.; **HUNTINGDON CO.** Southcentral Region Office, Rt. 22, Huntingdon, April 22, 8 a.m. to noon; Raystown Sport Show, April 21-23, during show hours.

**BRADFORD CO.** On main streets of Troy and Canton, May 5-6, 10 a.m.; **CARBON CO.** Mauch Chunk Lake Park, May 5-6; 10 a.m.; **COLUMBIA CO.** PP&L Susquehanna Riverlands, Berwick, May 7, 1 p.m.; Columbia Mall, May 5-6, 10 a.m.; **LUZERNE CO.** Wyoming Valley Mall, May 5-6, 10 a.m.; **MONROE CO.** Stroud Mall, May 5-6, 10 a.m.; **MONTOUR CO.** PP&L Montour Preserve, Washingtonville, May 6, 1 p.m.; **SULLIVAN CO.** Dushore, May 5-6, 10 a.m.; **SUSQUEHANNA CO.** main streets of Hallstead and Montrose, May 5-6, 10 a.m.

**BERKS CO.** Southeast Region Office,

Reading, weekdays, April 10-28, 8 a.m. to 4 p.m.; **DAUPHIN CO.** PGC Headquarters, Elmerton Ave., April 24-28, 8 a.m. to 3:30 p.m.; **LANCASTER CO.** Middle Creek Wildlife Management Area, April 22, 9 a.m. to 5 p.m. and April 23, noon to 5 p.m.; **MONTGOMERY CO.** St. Luke's Church, Obelisk, April 8, 9 a.m. to noon, and Green Lane Reservoir, April 29, noon to 3 p.m.; **NORTH-AMPTON CO.** Palmer Park Mall, April 12-16, 10 a.m. to 9:30 p.m.

**BUTLER CO.** Clearview Mall, April 21, 5 p.m. to 9 p.m., April 22, noon to 5 p.m., and April 23, noon to 5 p.m.; **ERIE CO.** Millcreek Mall, April 22, 1 p.m. to 4 p.m.; **JEFFERSON CO.** Martino's Super Duper, Brockway; Jefferson County Courthouse, Brookville; and County Market, Punxsutawney, all April 22, 1 p.m. to 4 p.m.; **CRAWFORD CO.** Meadville Mall, April 15, 1 p.m. to 8 p.m.; Pymatuning Museum, April 13-23, 8 a.m. to 4 p.m.; **VENANGO CO.** Northwest Region Office, Franklin, Rt. 8 South, April 15, noon to 5 p.m., April 17, 10 a.m. to 2 p.m., and April 18, 10 a.m. to 2 p.m. **WARREN CO.** Warren Mall, April 15, 1 p.m. to 5 p.m. and April 16, 1 p.m. to 5 p.m.

**CENTRE CO.** Scotia Range, April 12-16 and April 19-23, 8 a.m. to 4 p.m.; Howard Nursery, April 10-14 and April 17-21, 8 a.m. to 3 p.m.; **LYCOMING CO.** Northcentral Region Office, Jersey Shore, April 7, 8 a.m. to 4 p.m. and April 8, 9 a.m. to noon; **POTTER CO.** Salvages Video, West Street, Galeton, April 15, 9 a.m. to noon.

**ALLEGHENY CO.** North Park Nature Center, April 15, 10 a.m. to 2 p.m.; **WESTMORELAND CO.** Southwest Region Office, Ligonier, April 15, 10 a.m. to 4 p.m.



**RULES OF ETIQUETTE** while hunting are not as formal or well defined as they are for many other social functions, yet they are vitally important and can make or ruin an outing.

## *Common Sense and Consideration*

**E**MILY POST and Amy Vanderbilt don't have the corner on etiquette. I may not be the Miss Manners of the sporting set, but I do know that how hunters conduct themselves, etiquette-wise, can determine whether the day afield was enjoyable and whether or not they'll hunt together again.

Etiquette isn't restricted to which fork to use when or where to seat whom at a wedding. Etiquette is simple courtesy, politeness, and consideration. It is being nice to others in the way we'd want them to be nice to us. Rules of etiquette are guidelines of expected behavior that make getting along with each other more pleasant and that allow social gatherings to run smoothly.

That includes hunting outings. Hunting etiquette has in it something of safe gun handling and ethical treatment of the game, but it's mainly common sense and a regard for others' rights to the

sport. What sportsmen expect of each other may vary between groups and from region to region, but, from my years of hunting, I believe I know a little of what's "proper" in the woods and fields. My hints may keep you from committing those "faux pas" that can make you an outcast in your hunting circle, without knowing why.

I made one of my biggest gaffs on practically my first hunting trip. It was my first deer drive, and I was to be a stander while the drivers went through the thicket. I had an end position, around which two deer sneaked, instead of passing within bow distance. When I saw the deer go by, I didn't know what to do. Should I stay there? Should I go after them? Maybe I should try to push the deer back to the other hunters? I knew nothing about deer drive etiquette and I followed my own instincts. An hour later and a quarter of



a mile away, the rest of the group caught up with me. And I caught it for leaving my post.

Like so many who blunder socially, I goofed because I hadn't been told and hadn't bothered to ask how to act. Organization and each person doing his part are the keys to a successful drive. I know now that standers are to remain where they were placed until the end of the drive. If a stander is told to post at a specific tree or where he can watch a certain trail, he is to go there, not to a spot 50 yards away because he thinks it's better. Often the drive's organizers have prior experience in exactly where the game will run. If the deer do pass by out of range, the stander does not follow, but does make a note of their direction. The patch of cover they are heading to can be pushed out on the next drive.

It's courteous to allow those who did the walking on one drive to be standers on the next. That way, everyone gets a chance to shoot. In most cases, the standers are the designated shooters and it's considered bad manners for a driver to fire at game. Safety is a prime factor on a drive, with both deer and drivers coming at the standers, so plenty of blaze orange is the rule. Orange hats are not amiss in bow season, either.

When a driver reaches the standers, what should he do? He stops at the line and silently waits for the rest of the drivers to come through. There may still be game moving. When drivers happen on hunters already posted on the ground they're pushing, it's polite to inform them of the drive in progress and to invite them to stay put, as they might get some shooting, too. It's very wrong, however, to see a drive forming and to butt in on it by getting ahead of or among the standers.

Here's another situation: You are deer hunting, passing through the woods and spot another hunter on stand. What should you do? Should you pass by, with a friendly wave of the hand, or saunter over and chat? Or should you detour around? The choice is up to you, but whatever you choose, do it quietly. The

hunter already posted has first rights here and expects you not to chase off any approaching game by hollering, "Hey you there, ya seen anything?"

If a hunter is posted along a trail, he should expect to see other hunters passing by. It's correct to continue past him on the path. However, if the terrain permits, I often skirt wide around the stander, so as not to interfere with his watch. I take my own stand far enough away that we both have room to shoot and, to be more comfortable, out of sight. No one likes to be crowded into feeling it's a contest to see who gets the first shot.

### A Courtesy

As hunters come in all ages, shapes and sizes, they have differing physical abilities. It's a courtesy to offer to help those less athletic. This can be as simple as slowing the pace of a drive or suggesting a rest break on a rabbit hunt. Or it can be as charitable as field-dressing and dragging big game. However, it's the responsibility of those who know they can't keep up with the brawny six-footers not to expect others to hold back their hunt. Offer to still hunt on your own instead, or hunt close enough to the road that you know you can get a deer out by yourself. It's certainly all right, though, to graciously accept being a stander on a drive an extra time or two, but only if it's offered.

If you are the one organizing a hunting party, you are as much the responsible host as if you'd set up any social do. You should see to the needs and niceties of your guests. Take along some extra sandwiches, an extra thermos, warm

## Another View...

by Linda Steiner

## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

clothes and a rainsuit, and perhaps a spare firearm in case someone's malfunctions. Certainly take spare car keys and arrange to hide a set outside the vehicle. Anyone who gets too cold, too wet, or who needs that spare ham-on-rye can get in. Guests should reciprocate by buying gas when you stop to refill, treating you to a meal on the way home, or at least offering to be the host/vehicle driver next time.

### Don't Have to Worry

Making those around you at ease with your safe firearm and bow handling is just good manners. It's appropriate when two or more archers get together to take the hunting arrow off the string and replace it in the quiver. That way, the other hunters don't have to worry about your attention lapsing or inadvertently walking into the broadhead. With guns, make them super safe when you meet by slinging them over your shoulder, breaking open a double, or keeping the muzzle pointed as far from the others as possible. Don't point the bar-

rel at the ground between you. Even if you know you won't raise it, they don't. And always advise the vehicle driver, before you get in, that your gun is unloaded. Don't make him have to ask.

I don't know much about the etiquette of upland game or waterfowling, being mainly a forest game hunter myself. But even I am aware that it's uncouth, as well as unfair, to shoot game moving in front of another's dog, or to frighten off a flock that passes out of my gun range, but is zeroing in on another's blind. It's extremely impolite to interfere with chances at game that rightfully belong to someone else.

I do consider it not only proper, but an ethical necessity, to down a legal animal that comes up to me that has already been hit. It's a hunter's responsibility to finish off wounded game as quickly and humanely as he can. If the hunter who made the first shot is trailing the animal, you can always let him tag his prize. If he isn't following, which may only be because he didn't know his shot connected, the game is yours by default. Conversely, if you are trailing a hit and the hunter ahead shoots, don't expect to claim the animal from him, even if you feel yours was a vital shot. If he dropped the game, it's his choice to give or keep, and your place to be happy that the animal you wounded was dispatched.

You may not agree with all my hunting etiquette suggestions, or you may want to add a few of your own. There are no hard set rules to sporting politeness, just as the Mmes. Post, Vanderbilt, and Manners's columns are filled with varying interpretations of what to do when in the social world. But underneath all their advice, as well as mine, is a single thought: Common sense and consideration for others is always in good taste.

## Thoughts While Walking

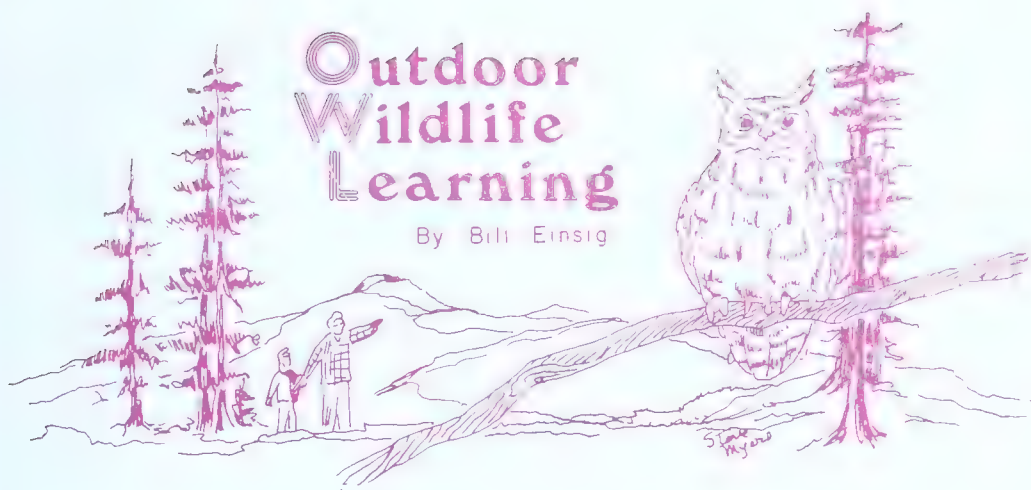
*The law must be stable, but it must not stand still.*

—Roscoe Pound



# Outdoor Wildlife Learning

By Bill Einsig



## Flaming Lessons

**A** MAJOR natural event with historic and political overtones occurred in 1988 as fire swept through Yellowstone National Park. While more than 72,000 forest fires, encompassing more than five million acres, burned in the United States last year, none of the fires drew the attention of press, politicians and general public as did the Yellowstone fires.

From late July through September, the news media kept us abreast of the spreading conflagration as it appeared to devour increasingly larger chunks of the nation's foremost wilderness area. From published photographs, the entire park looked like an inferno leaving a blackened, barren landscape with only smoldering snags where forest had just been.

It is true that Yellowstone experienced the most widespread fire season in recorded history. But other lasting impressions are not true. Most of us are not fire ecologists or land managers and we don't have direct knowledge about the fires themselves. Our understandings are largely shaped by what we read—and that's often presented by reporters with only a superficial understanding of the complexities involved and an interest that lasts only as long as the fires are hot news.

Unfortunately, our misconceptions could support a political effort to restrict wilderness preservation in the near future. Therefore, we need to examine the Yellowstone fires to see what they mean to the ecosystem and the management system that supports our wilderness areas. For students of the environment, the fires

of Yellowstone are an environmental issue we can not overlook.

*Misconception 1: The Yellowstone fires burned nearly half of the park's forests.*

Exaggerated claims like this resulted from a superficial understanding of daily fire updates issued by the Park and Forest Services. Those reports indicated acreages of fire "perimeters" enclosing maximum areas of fire activity. An explanatory footnote on those reports, however, was largely ignored. It explained that only about 50 percent of the area within the perimeters actually burned to some degree.

Based on a study of aerial photographs in early October, approximately 440,000 (20 percent) of the 2.2 million-acre park was actually burned. About half of that actual burn area suffered serious canopy fires that killed most of the trees. The bulk of the remaining acreage was surface burn, where dry wood, shrubs and understory trees burned but larger trees survived.

*Misconception 2: Much of the Yellowstone ecosystem was destroyed, or permanently altered, by widespread fire.*

Researchers have found solid evidence that fire is a natural component of the Yellowstone ecosystem. Fires similar to those of 1988 have occurred in the past, probably once every few centuries for the past 12,000 years.

Fire releases nutrients bound into the organic waste of dead limbs, fallen needles and downed trees. It opens the

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## GAME NEWS

For a Friend . . .

canopy into sun-splashed meadows where rich grasses and other food plants begin a rebirth of succession leading to another forest—and probably another fire.

By autumn of '88, sections of the fire-scorched forest floor was already springing to life with new growth of grasses. Researchers examining soil samples found few areas where intense soil heating killed all roots, rhizomes and seeds. In fact, the seeds of rebirth were there waiting. Fire dependent cones of lodgepole pine sprung open as a result of the blaze and now, in many areas, new seeds number as high as one million per acre.

Most of us have been taught from the time we could barely read that fire is the worst enemy of forests. In truth, some natural systems are actually dependent upon fire to maintain their character.

*Misconception 3: The fires caused a devastating loss of wildlife.*

Surveys conducted last autumn indicate 243 elk, 5 bison, 2 moose and 4 deer died as a result of the fires. The elk loss represents less than 1 percent of the park's summer elk population of 30,000 to 35,000 animals.

In most cases animals were seen grazing near fires without apparent alarm and simply moved out of the way as the blaze passed. Many then returned to the burned area as the fire moved on. The wild panic of Bambi's friends appears to be more an element of fanciful drama than reality.

*Misconception 4: Firefighters saved many acres of forest land from the destructive blaze.*

The cost of what has been called the largest firefighting effort in the history of the United States, soared to more than \$115 million and involved more than 9500 firefighters. Yet most experts do not believe the effort actually "saved" much forest. The firefighters were very successful, however, in protecting human life and private property threatened by the fire.

Efforts to control the fires were frustrated by extremely dry, windy conditions. While bulldozers pushed fire lines clear of fuel, winds carried burning embers aloft as far as a mile and a half ahead of the main fires. Blazes jumped traditional barriers such as roads and rivers with relative ease. Huge loads of dry fuel, accumulated during the past hundred years of fighting all fires as they occurred, burst into flames almost without regard to the efforts of firecrews to stop them.

A good example of this frustration is the North Fork Fire, which ultimately threatened the area around Old Faithful Geyser and on which the media focused so much attention. Set on July 22 in Targhee National Forest west of Yellowstone by a carelessly thrown woodcutter's cigarette, the North Fork fire was fought immediately. Despite these efforts, it later spread into Yellowstone Park and, by late September, its perimeter enclosed more than 400,000 acres—the largest area of the remaining eight blazes in the park.

Fire experts generally agree that the dry fuel and weather conditions set the stage for fire that could be controlled only by nature herself. In fact, that's what happened.

*Misconception 5: The extent of the fire was a direct result of the park's "let-burn" policy.*

Since 1972, natural fires in Yellowstone Park have been managed differently than those on most public forest land. Recognizing fire's natural role in the ecosystem and its beneficial reduction of fuel loads, park managers allowed natural fires to burn themselves out, as long as they did not threaten buildings or human life. That policy worked fine for 16 years as 140 lightning-caused fires burned a total of only 34,000 acres.

In 1988, the policy was lifted on July 21 when just 17,000 acres were affected by the fire. Yellowstone began to fight all fires—natural and man-caused—but with little effect. Some of the fires in Yellowstone were caused by humans and fought from the beginning. Some fires moved into the park from surrounding public forests where they had been fought all along. Still, the fire perimeters grew from 17,000 acres on July 21 to more than a million acres by October.

The park's natural fire policy was accused of permitting fires to burn out of control. Politicians, always sensitive to



public sentiment spurred by the news media, seem eager to change the policy with tighter controls on what "wilderness" actually means. What they seem to want is a managed wilderness where fire, and any other aspect of nature they choose, is adequately controlled.

#### For More Information . . .

The National Park Service is eager to provide factual information on the Yellowstone fires and their effects on the park's future. They will provide, at no charge, packets of information to teachers requesting them. Request "*The Yellowstone Fires: A Primer on the 1988 Fire Season*," from the National Park Service, P.O. Box 168, Yellowstone National Park, Wyoming, 82190.

Two other articles are excellent reviews of the fires and of the controversy surrounding the park's fire management policy. Read the Special Report: "The Incineration of Yellowstone" in *AUDUBON*, January, 1989. Also, *SCIENCE NEWS*, No-



verember 12 and 19, 1988, ran a well written two-part article on the fires and their consequences.

Numerous other media covered the fire from various perspectives. Standard library references such as the *New York Times Index* and *Reader's Guide to Periodicals* provide a diary of reports as the flames of '88 spread through the forests of Yellowstone and the bureaucracy of the nation's capital.

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**PENN STATE** is again offering **Conservation Leadership Schools** for students 15 to 17 years of age who are interested in the outdoors and want to learn about wildlife, forestry, conservation and much more. Two 2-week sessions will be held at Stone Valley, where students will live on the shore of the 70-acre lake and spend each day learning about the management and protection of our natural resources. For more information call or write Tammy Crissman, 109 Grange Building, University Park, PA 16802 (814-865-3443).







## By Jack Weaver

Wildlife Conservation Officer  
Centre County

**G**AME COMMISSION and Fish Commission field officers generally work closely together, especially on the first few days of a major season. So it was that I found myself shivering with a multitude of fishermen and watching a procession of snow squalls chase each other over the rolling hills surrounding Hamilton Lake in Tioga County. We were waiting for the opening hour of trout season to arrive. I had received reports that certain persons were in the habit of catching over the limit of trout here on opening days.

I had prepared as best I could for my little deception of mingling in among the throng of fishermen lining the shore. I was attending night classes at Mansfield University at the time, so I decided to pose as a student. I dressed in faded blue jeans and jean jacket, complete with mushroom and flower patches sewn on. That was contemporary collegian vogue in the early '70s. I could get away with such a disguise then. These days I'd have to try for a professor image. I also took along some text books to "study" as I sat by my rod. I knew I wouldn't need to worry about catching anything; I didn't bait my hook. I wanted to concentrate fully on those around me. While pretending to study I could sit a few feet behind the line of fishermen and watch. Between the pages of my textbook was a loose sheet of paper that was filling

up with descriptions of some successful anglers.

Not all fishermen are successful. Like any other sport, fishing takes practice and study to become really good. But, the good ones were pulling in fish every couple of minutes. I noted the exact time they landed each fish. One guy quit keeping fish before he caught his limit and started releasing them. I scratched him off and concentrated on three others. Soon another one wandered out of my sight. But two others started passing fish to other people in their party. That made it difficult to keep track of and remain undercover. For one thing, even though I had no bait on my hook, I had to fool around with my rod occasionally to maintain my cover. Then, too, there is always Murphy's Law—whatever can go wrong, generally does.

One suspect's group, we'll call it Group A, had a couple of children along. They were running back and forth, doing the things youngsters do to agitate serious anglers and frustrate watching conservation officers. The adults in this group were sitting on buckets in which they put the fish they caught. When anyone in this group caught a fish the children would whoop and holler, grab the fish, and run around with it until someone would yell at them to put it in a bucket. Occasionally, my main suspect and someone else in the party would catch fish at the same time. Trying to keep track of which bucket my suspect's went into was like trying to figure which pod the pea was under.

Meanwhile, to my left, Group B's main angler was already over the limit and going for more. These people just threw their fish back on the bank in a more or less common pile. That was, at best, difficult to sort out, so I just concentrated on writing down when my suspect caught a fish and noting that it didn't go back into the water.

Then I noticed (barely) that the guy who had been releasing his fish started keeping them again. But now I wasn't sure how many he had. I made a note to spot check him when I finally decided to stop this circus. The waterways conservation officer and I had decided beforehand that I would stop them after they had taken about two over the limit. By now Group A had one over the limit, and Group B had two and was trying for more.

To add to the confusion, people began to shift around, and others were coming and going all the time. Someone down the



line to my right began to toss beer cans behind him in the grass. I couldn't run right down there or it would have blown my cover. My stomach began to churn and I began to appreciate what a fox must feel like when a covey of quail bursts in front of its nose. Who do you go for?

Then a real problem appeared, in the uniform of a deputy waterways conservation officer. He was walking along the shore, checking fishermen here and there. I hoped he wouldn't reveal my identity. When the man who had stopped keeping fish and then started again saw the deputy, he folded his rod, picked up his basket and nonchalantly headed for the parking lot. The officer, however, was busy talking to someone else and didn't pay any attention to him. I didn't know if he had more than his limit or not because I had quit paying attention to him earlier, when he started tossing fish back. I decided to follow old Ben's advice and sit tight. "One in the hand (two in this case) was worth two in the bush." My other two suspects were getting nervous as well, and it was funny watching them try to keep one eye on the deputy and one on their fishing. Both were wading and appeared to be fishing spinners.

Then came my turn to be checked. I stuck my nose in my book and hoped the deputy would just walk by. He did! I felt jealous, though. I didn't even look worth bothering with. He walked over to Group A and checked their buckets, but none of them contained too many fish. They had been dividing their catch up among all the buckets, but the officer didn't know that. Then he moved on, and as he strolled out of sight my culprits began to relax. When the suspect in Group A finally caught two over the limit, the one in Group B had three and was still fishing. It was time. Enough is enough, and my nerves had started screaming "Uncle" long ago.

I wish I could have captured on paper their shocked looks when they discovered who the dumb college kid really was. All in all, it was a good bust, and that evening both violators settled out of court with Waterways Conservation Officer Ray Hoover. I never did catch up with the person who had been throwing the beer cans. But I found the cans and took them along.

Generally, I like working this way. Just as there are times and places for full uniformed patrols, there are those times, especially in wildlife law enforcement,

where the only way to do the job is undercover. I'm not talking about deep cover, where assumed identities are required in order to infiltrate gangs of violators. I've never been involved with anything like that, except on a minor scale, so I'll let those with the experience tell about it. I'm talking of just working in plain clothes, at those times when to be effective we must blend in.

Take the case of the teacher, for example. This violator was a teacher at a local high school, a science teacher. Now I work with teachers a lot, especially science teachers, and I have the utmost respect for them, professionally and personally. But this guy was a bad case. He wasn't just violating the laws, to make matters worse, he was bragging about it to the high school boys. He needed to be caught and I decided to try.

We had received information that this guy had taken more than 40 fish over the first weekend of the previous trout season. He was a serious angler and very good at catching fish, and he was greedy. Our informants told us he caught fish for everyone in his party then, at noon, they all went to camp for a fish fry. Later in the afternoon they would come back and fish again. The guy fished only a few certain holes in Pine Creek, and although I had never met the man, our informants had given us a vivid description.

Pine Creek on opening day of trout season is a carnival. I was over near Asaph, where people often start float trips through the canyon. Usually in April the creek is roaring high. Despite the rare warm day for the opening of trout season that year, the creek was at its worst. Both banks were lined with fishermen, wading in as far as they dared and casting toward the middle. Through this hail of flying sinkers, spinners and hooks, floated an endless procession of rubber rafts and canoes, with their hopefuls, in turn, casting toward the anglers on shore. Invariably, lines got tangled, and rafts or people got snagged. Threats flew as thick as the hooks, and occasionally fights broke out.

I stepped into the middle of this mess, decked out in hoofty vogue—dirty blue jeans, torn camo jacket, a ratty looking hat and old sneakers, not to mention a full crop of unshaved whiskers. The bank by the hole I wanted to watch was full of fishermen, so I started fumbling with my rod. It was old and the reel badly jammed with a bird's nest of monofilament. I started

yelling and mumbling at the mess, finally throwing the rod on the ground and jumping on it. Some of the fishermen moved off, shaking their heads. The situation was bad enough between the rafts and shore fishermen already, nobody wanted to chance standing close to a crazy man. That's just what I wanted, though, because I ended up on the opposite side of the creek from my suspect. He was only 15 to 20 yards away, but with the torrent between us, he may as well have been two miles away—which he actually was if I had to walk around to get over to him. I had my old creel stuffed with notebook, pens and binoculars, but I didn't want my neighbors to see that, especially the binoculars which I fully intended to use—somehow.

When the season started I watched my suspect wade into the creek and start fishing, while I was going through my tirade. I didn't have time to go all the way around to his side of the stream. It was here and now, and my man began catching fish right away. Hardly anyone else was catching anything but rafts or each other. Everytime my suspect caught a fish I managed to eyeball it through the binoculars. I learned more ways and angles to use binoculars that day than I ever imagined. Standing with my back to him and bent at the waist while pretending to root through my creel; one time, I checked his catch upside down from between my legs. But I watched him bag seven and I was sure each one was a trout. Then he walked away!

He went down to the next hole, and I didn't think I could move along without him getting suspicious. What to do? I considered trying to swim across, but that would be paramount to stepping in front of a subway, with all those rafts and canoes roaring down the swift current. I walked back to the road, which paralleled the stream on my side, and tried to observe him from there. After a while he seemed to quit fishing and was just talking to his buddies. I wasn't sure if he had his limit or not, so I figured now was as good a time as ever to go around to his side. That meant hiking a mile or more out to Route 6, where the highway bridges the creek, then over to a railroad bed and about a mile walk down to my suspect. It took an hour, and when I got there he was gone. I glanced at my watch, almost noon. So he went back to camp to gobble up his catch, I thought.

I sat down in the grass and let the warm sun put me to sleep. I awoke about 1:30 to the sound of voices. Many of the fishermen had left, and even the raft trains had thinned down. I looked and there came my teacher and his two buddies, ambling down the tracks, right on schedule. I pulled the hat over my face and pretended I was still sleeping. He promptly waded into the creek and caught two more trout. Then he started wading downstream. I got up and followed along, trying to maintain some distance.

I knew he lived in my district and probably knew what I looked like. I was right. He looked hard at me for a minute and then got out of the creek and came toward me, walking on a path alongside the stream. I tried to busy myself untangling the rat's nest in my creel, but I felt, rather than saw him, take a hard stare at me as he went by. He walked quickly over to his buddies and talked a bit, then waded upstream out of sight.

After a bit I moved up until he was in sight. I tried casting and fooling around, trying to look serious about fishing. But he kept glancing my way. Shortly he caught another fish and released it. Then he got out of the water and went back to his buddies, and then they all started for the railroad tracks. I hurried and caught up to him before they went very far. Before I could identify myself, he told me he knew who I was. I checked his creel; inside were three more freshly caught fish. I told him I had been watching him all day and asked where the seven were he caught that morning.

His countenance dropped and he paled a bit. Then he announced that I couldn't prove a thing without the evidence. He rubbed his belly and smiled. I pulled out my sheet with his perfect description and the exact minutes recorded when he caught each fish, and then I smiled. He countered with the proposal that I couldn't have known if they were all trout and suggested some were suckers. I showed him the binoculars in my creel, and smiled again. He settled with Ray Hoover on a field receipt the next evening.

Working for the Fish Commission during trout season isn't a one-sided affair. Through the years the favor has been returned by their personnel during hunting season. Now I'm looking forward to working closely with Brian Berger, our new waterways conservation officer in Centre County.



# Thornapples



*Chuck Fergus*

A FEMALE northern oriole is tugging mightily on the string that used to suspend my suet feeder from a branch on the sassafras tree, until a bear, full of spring wanderlust and hungry for a snack, showed up one night and tugged the feeder down. The oriole is pulling and wrenching the string from side to side, flapping her wings and shaking her head; she isn't making much progress. Darned if I'll give her the string; I need it to reattach the suet feeder next fall.

A few days ago during breakfast, I watched a robin prospecting for nest sites in the trees in front of the house. The robin found a nice sturdy three-way crotch in a white oak and stayed there crouching, bobbing up and down, changing positions slightly, for five minutes or so, as if checking on the various views.

A dove flew past the other morning with a long thin stick in her bill. There are no pines to speak of around here (conifers are favorite dove nesting trees), so I wonder where she's building. I see her and her mate almost every morning, in our lane, picking up grit.

The phoebes are way ahead of the rest. They showed up on March 12, darting in and out under the shed where we park the truck, checking on their last-year's nest. It apparently was still in top condition, for they moved right in and she laid eggs, and then, with Memorial Day fast approaching, their first brood was feathered out and sitting cheek-to-jowl in the small, mud-built half-cup, while the

other birds in our woods were just getting their families underway.

Birds' nests are fascinating structures. They range in size from the hummingbird's cup (it fits easily into the palm of a child's hand) to the bald eagle's stick-stack, upon which a man may stand; in elaborateness, from the simple depression in the leafy groundcover where the woodcock lays her eggs to the painstakingly woven hanging sack of the oriole. (Ours finally gave up on the suet feeder's string, and flew away in a huff.)

The functions of a bird's nest are to protect the eggs and nestlings from rain, cold, flood, burning sun, and the attention of predators. Usually the male chooses the nest site, and then his mate does the building; although in some species the male builds, or both sexes share in the task. A bird's only tools are its bill and its feet, which, depending on the species and nest type, may be employed as chisel, drill, pick, shuttle, needle, or trowel.

## Many Degrees

There are many degrees of craftsmanship. One can usually see the eggs of the mourning dove by looking up through the bottom of its nest. Ditto the brown thrasher and the rose-breasted grosbeak. In Iceland my wife and I found a ravens' nest that was composed of sticks and sheep bones, and decorated with raven dung. At the other end of the scale are the woven beauties of oriole, red-eyed vireo, and chipping sparrow. (The chipping sparrow used to be called the "hairbird" because it lined its nest almost exclusively with horsehairs; with horses disappearing from the American farm scene, the chipping sparrow has returned to using fine grasses to line its nest.) The goldfinch builds a lovely tight cup out of grasses and moss, lined with thistledown; so firmly is the nest constructed that a sudden shower may flood an unshielded one, causing the young to drown.

Ornithologists believe that nest building is an instinctive urge, although each individual bird must refine its own technique through experience. Which is

why a robin's nest, unwisely built on a flimsy limb, may tumble during a thunderstorm and dump its eggs or young on the ground. I've often found nests apparently abandoned halfway through their construction; the biologists believe these half-finished attempts are the work of youngsters experimenting with their first nests.



Most tree nests have a base of coarse sticks or twigs anchored to a sturdy crotch for support. The superstructure is made of finer materials—stems, twigs, vine lengths, roots, leafstalks, pine needles—while the inside is lined with even finer stuff: inner bark, tiny rootlets, thistledown, milkweed silk, and seed wrappers. To blend with the surroundings, nests in the grass are usually made of grass; in reed beds, of reeds, and in trees and shrubs, of branches and twigs.

Before me on my desk sits a most exquisite nest. It is made of tiny grass stems and leaf stalks, the fuzz from last year's sumac bobs, dog hairs, soft seed husks, and all sorts of unidentifiable plant matter, molded and worked together into a kind of felt. The outside of

the cup is covered with pale blue-green lichen, little plates about an eighth of an inch in diameter, the kind found on tree bark. The glue holding the lichens to the nest, and cementing the various strands and particles of plant matter together, appears to be spider silk.

I found the nest last fall after a storm; it was lying on our lane. I got out my *Field Guide to Birds' Nests*, by Hal H. Harrison, and after some page-turning and head-scratching I finally identified the nest as that of a blue-gray gnatcatcher, a not-uncommon bird in our woods.

The phoebes' nest, under the shed, is built of weeds, grasses, and plant fibers cemented together with mud. Every summer since we put up the shed six years ago, this phoebe pair—or another—has raised two, sometimes three, broods in the same nest. Often when I come upon a hunting cabin in the woods, I'll find a phoebe's nest above a window or under a porch roof—semi-circular when plastered to the side of wall, beam, or rafter, circular when built on top of a framing member. In the absence of manmade structures, the phoebe will attach its nest to a rock face or a cliff.

Like the phoebes, raptors often use the same nest year after year. A bald eagle's nest—called an eyrie—is built in the crown of a big, often dead tree; each year, new sticks are added. A nest near St. Petersburg, Florida, was 20 feet deep and 9 feet across; it must have weighed literally tons. Occasionally smaller birds—sparrows, grackles—build their nests in the margins or undersides of eagles', hawks' or owls' nests, where they enjoy free protection from predators and a certain laissez-faire attitude on the part of the raptors, who probably realize they cannot catch their smaller, more maneuverable neighbors.

Tufted titmice live in our woods and frequent our birdfeeder; yet I haven't been able to find a nest. The species is said to nest in pulpy, decayed wood, such as a dead standing maple or aspen. Some sources say titmice excavate their





own cavities, while others believe the birds use existing ones. The bottom of the cavity is lined with bark, dead leaves, grass, and moss; the actual cup for the eggs is padded with hair and fur. The titmouse can be bold about obtaining hair for its nest. In Ohio one man watched a titmouse alight 300 times on a pair of opossums resting in a tree and pull an estimated 1500 hairs from their backs, while the marsupials—phlegmatic creatures—scratched themselves, licked their remaining fur, and napped.

I have put up six nesting boxes on the place, and one morning, feeling inquisitive, I got the extension ladder and made the rounds. Only two of the boxes were tenanted. One held a litter of flying squirrels, the mother fanned protectively over her young, blinking up at me as I carefully replaced the lid. The other box had five gray-and-black-and-white fledglings, unmistakably nuthatches.

Many birds nest in tree cavities, abandoned woodpecker holes, or manmade boxes: bluebird, starling, screech owl, wren, tree swallow, purple martin, titmouse, nuthatch, chickadee, house sparrow, and prothonotary warbler. Given the choice, six North American ducks (wood duck, bufflehead, Barrow's and common goldeneye, hooded and common merganser) select cavities for nests.

Among cavity nesters, the passerines (the bluebird, starling, etc.) have altricial young—they hatch naked and are raised in the nest for several weeks, then

they fly out under their own power. The ducks, on the other hand, have precocial young, unable to fly but designed to get out of the nest as soon as they hatch, and start feeding themselves. How do they get down from the nest, which may be 30, 40, even 50 feet up? Simple. They jump. Small and lightweight, they float like bundles of thistledown, and land unharmed.

I have almost stepped on nesting whippoorwills, which make no nest at all, just lay their eggs smack-dab on the ground. Woodcock, grouse, turkeys, and pheasants construct exceedingly simple ground nests. Many shorebirds lay their eggs right on the sand. The kingfisher and bank swallow dig holes. The towhee, veery, and some of the warblers and sparrows build fairly complex nests on the ground; the ovenbird gives its nest a roof, rounded like an old-fashioned oven.

### Bizarre Places

Nests have been found in bizarre places. Tree swallows, barn swallows, and phoebes have all successfully nested on moving ferry boats. Mallards usually nest on the ground, in tall grass or in thick dead reeds, but they have also been found in rain gutters, vines, and window wells. House wrens have taken up housekeeping in flowerpots, boots, the radiators of junked cars, and empty cow skulls.

After checking on my nest boxes that morning, I put the ladder away, feeling pretty good about the nuthatch family

in the box nailed to the hickory in the lower woods; I went into the shed and hunted around for some scrap cedar, thinking about building another box or two. I got a bunch of old string to put out near the suet feeder, so the northern oriole would have some first-rate mate-

rials for its nest and get started about the rest of its business.

On my way out the door, I heard a great whirring and several loud startled peeps. Five golfball-size greenish-colored blurs went rushing past my head. The phoebes had left the nest.

## Fun Games

### “Let’s Talk Turkey”

By Connie Mertz

Read each statement carefully and place the *first letter* of each correct answer in the space provided.

\_\_\_\_\_ Young turkeys enjoy eating these in summer: Insects or Carrion

\_\_\_\_\_ Wild turkeys have this important sense: Keen eyesight or Excellent sense of smell

\_\_\_\_\_ The cause of most turkey hunting accidents: Accidental gun discharge or Hunter shot in mistake for a turkey.

\_\_\_\_\_ A safe hunter: Always gets his limit or Never shoots at a sound or movement.

\_\_\_\_\_ Mature gobblers are called: Toms or Jakes.

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\_\_\_\_\_ Summer turkey flocks are made up mostly of: Boss gobblers or Family units.

\_\_\_\_\_ Hunters who show respect for game, firearms, and other sportsmen are called: Ethical hunters or Slob hunters

\_\_\_\_\_ This call is said to be the most common call made by turkeys: Cluck or Yelp.

\_\_\_\_\_ A favorite fall and winter food of the wild turkey: Acorns or Pine needles.

\_\_\_\_\_ A turkey management tool in Pennsylvania: Artificial feeding or Trap and transfer.

\_\_\_\_\_ Never do this during spring gobbler season: Stalk a turkey or Yell to alert other hunters.

Unscramble the letters to discover something you should do every time you handle a firearm.

\_\_\_\_\_

\_\_\_\_\_!

Answer on page 64





**ALTHOUGH** the number of archery hunters is holding around a quarter million, the number participating in organized target activities has declined in recent years. Such competition, however, is a great way to sharpen your skills.

***Be a winner. . .***

## **Beat Your Best**

**By Keith C. Schuyler**

**N**EW GADGETS, new bows and archery assists that have proliferated over the years, especially since the advent of the compound bow, have had a marked affect on participation in the sport. But although the number of licensed bow hunters has held fairly steady, at upwards of a quarter million, there has been a considerable decline in organized target archery activity. The number of clubs in the Pennsylvania State Archery Association, which had held comfortably at over 100, has dropped to just over 80 at last count.

I feel much of this decline can be traced to individual dissatisfaction with the conglomeration of equipment rules and classes. There was a time when the two classes of target archers were easily distinguishable. You were either a bare-bow shooter or a freestyler. You shot

with no markings or gadgets on the bow, or you shot with a sight and whatever else seemed helpful.

Then came the compound.

Almost immediately the longbow and recurve bow addicts were relegated to poor cousin status as this super shooting machinery produced unheard of scores. The resentment instinctive archers had at one time towards the advances in sights and other assists spread to free-stylers who wanted to retain some semblance of the pure target sport. What was good enough for the Olympics was good enough for them. In 1981, FITA Archers of Pennsylvania was formed, and they attracted many of those in P.S.A.A. who wanted to compete against a better defined and controllable segment of target archery.

Add to all that the introduction of

release aids, which remove the fingers from the bow string, and you have the final insult to archery in its purest form, i.e. a stick and string and an arrow.

Such unmitigated confusion, however, has not lessened the need for archers at any level to keep practicing, practicing, practicing—and to do it at the local archery club. I feel strongly about that. Such participation provides a most satisfying outlet for those seeking some sense of accomplishment, despite the various classes that often create confusion and break the financial backs of clubs trying to pay for all the awards necessary for a formal shoot. Your potential may confine you to a plateau of excellence somewhat below the expert category, but you should continue to strive to do your best.

Whether on the target line, the field course, or a three dimensional animal round, just go out each time to better the best score you have ever shot.

Sure, you would like to have a few trophies to collect dust on a shelf somewhere in the house (or attic, or garage or

cellar, if you get too many). And if you shoot each time to beat your best score ever, you will probably collect **your** share of trophies. More importantly, beating your best score will give you a sense of accomplishment that transcends any material evidence of a certain time or times when you bested your peers.

Get your own ability in proper perspective. Consider what you want out of archery. If killing a deer with a bow is your main ambition, you need only be good enough to consistently put a broadhead into a pie plate at 20 yards—from all reasonable angles and body positions.

If you prefer to do it with a bare bow and fingers, without the addition of modern sighting and shooting assists, more power to you. You may find it necessary to refine your woodsmanship to get closer to the quarry, but that only adds to the thrill and satisfaction of challenging the game. In my experience, some of the killing shots that counted most to me came as close as five to 15

**THE SOUTH MOUNTAIN BOWHUNTERS**, the archery division of Dillsburg Fish and Game, certainly ranks among the state's top archery clubs. Among their many 1988 accomplishments, they won first place (for the second year in a row) at the PSAA's indoor championships, the Southeast Regional Outdoor Target Championship, and the PSAA Southeast Regional Bowhunter championship. Pictured, left to right, front row are Brad Fulmer, Bruce Trostle, Doug Barrick and Denny Barrick; back row, Keith Garber, Ken Hertzler, Ed Harbold, Marshall Dean, Leo Zapatok, Joe Barbush, Jeff Hugill and Keith Early.





**THE COMPOUND BOW** probably created more confusion among organized archers than any other recent development. Here, Gus Spizzirri, Montgomery, shoots an early compound at a Bald Eagle Club tournament.

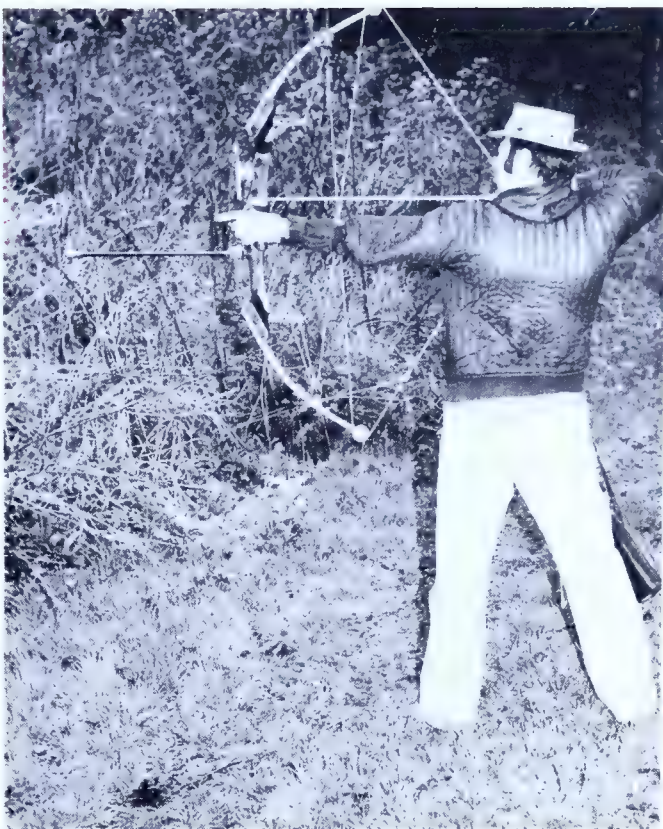
yards, while I was on the ground, with only a bare bow and fingers to launch the arrow.

Trying to stay on top keeps continued pressure on the best archers and can rob them of the more relaxed fun of shooting primarily against themselves. They should know; they did it at one time on the way to the summit of their own abilities.

When hunting, there is a different kind of pressure, and those who excel on the target line are not always the best in a woodland situation. This, nevertheless, does not discount the potential of transferring such skills to the hunting scene. Larry Wise, international professional champion and hunter, had only missed one deer (at last count), of many at which he has shot with the bow.

Most importantly, when you practice in association with others, there are always those who are most willing to help anyone seriously trying to improve his ability. You will find them at the local archery club, because they must continue to practice to retain the skills that have moved them to their present level of competence.

There is nothing wrong in setting up a few straw bales in the back yard to keep your shooting muscles in shape. But, if you are not satisfied with the results you are getting or the progress you're making, go where help is available. You obviously don't know what you are doing wrong, or you would correct your mistakes. Even someone who is not necessarily expert can pick out your more obvious faults by observing. Most of us

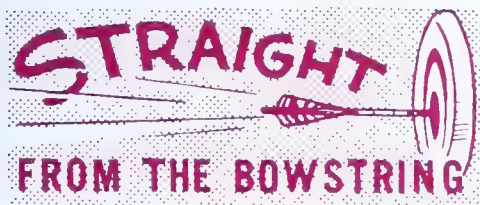


know the fundamentals, but errors can creep in that are more readily apparent to someone watching who may have had the same problems. Shooting faults to look for are creeping, plucking the string, canting the bow, dropping or raising the shooting arm, or permitting lateral movement on the release. These are common mistakes whether shooting bare bow or with all the accessories you can load on it. Too long a draw length can make establishing a constant anchor difficult. Too light or too heavy an arrow can cause lateral problems.

### **Greatest Satisfaction**

Some of the greatest satisfaction comes from helping youngsters improve until they are considerably better archers than the one who helped them get started.

Occasionally there are letters to this column asking where the nearest archery club is located. Most such correspondence comes from rural areas that are frequently not even on the map, and it is sometimes difficult to direct them without further mail contact. If you are





looking for a club, and help, write to Kenneth R. Mayers, Secretary of Pennsylvania State Archery Association, P.O. Box 77, McSherrystown, PA 17344. It is a good starting place for anyone with serious archery intentions.

It is almost always advisable to buy your bow from a reputable archery dealer, anywhere from a basement shop to a full-blown archery operation where there is frequently an indoor range. Those who try to save a few dollars by picking up equipment from a discount house risk buying bows and arrows and related accessories that are completely unsuited to the individual. Most of the businesses that deal exclusively in archery equipment will try to fit each customer with the proper equipment. This is especially important when buying a bow because it should match your personal draw weight and length. Also, arrows should be of proper length and spine for your bow. Otherwise, don't

**BACK IN the 1950s longbows and recurves were the norm at archery events. One thing remains the same, however; every archer should continually strive to make each score better than his previous best.**

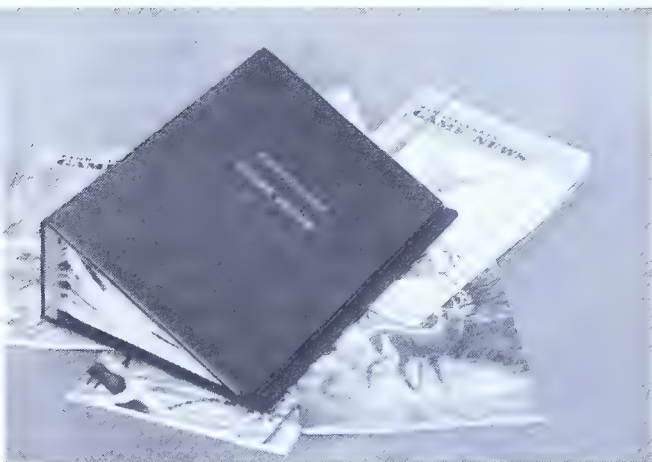
expect to ever reach your potential as an archer.

On the other hand, try not to fall into the group who blames equipment for their own inadequacies. They keep buying new bows and arrows, and the only improvement is in the cash flow at the archery dealers. Nearly all modern equipment is adequate if it fits the archer.

Depending upon how much time you can devote to the sport, and your personal physique, you will get the most out of yourself and your equipment if you are properly matched. This is not to say that you should never make a change as you develop, but if you get started right, you will know when it is time to move on. Usually, the greatest temptation is to move to heavier weights in bows and arrows. That's all to the good—but only if you can handle it.

Most compounds bows today can be adjusted upward if you start in the lower power settings. Recurves and longbows may require replacement if personal power and/or draw length improve.

Whatever else you do, strive to make each score better than your previous best. Whether it is in formal competition or the record you keep on the back of a used target, you are the most important archer to beat.



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**TODAY'S SHOOTERS** don't have to rely on ballistic tables or manufacturers' claims to determine velocity, they can actually measure it themselves. Here Bob Bell uses the Oehler 35P Skyscreen III system, a sophisticated chronograph that prints out about all the information a shooter would need to know.

# Chronographs

By Don Lewis

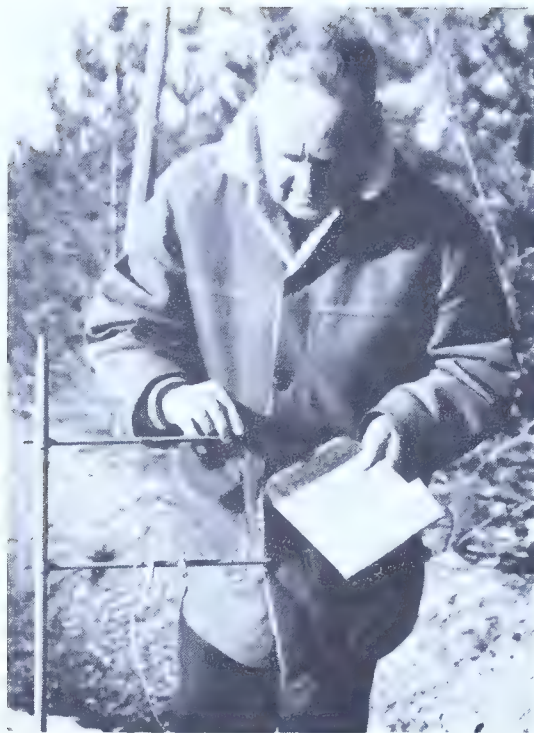
Photos By Helen Lewis

**I** ANSWER hundreds of questions over the course of a year, at gun seminars, over the phone and through the mail. The questions run the gamut from how many 30-30 Winchester Model 94s have been sold since its inception in 1895 (7 million) to whether one shotgun gauge has more velocity than other gauges (no). Among the most frequently asked questions, though, are ones about chronographs and their benefit to shooters and handloaders.

Back when I took up reloading chronographs were not available over the counter, or at least I wasn't aware of any. Sometime during the early 1960s, Herter, Inc. offered a chronograph that was within the reach of dedicated handloaders. To more or less set the scene, I'll explain a little about the impact home reloading was having on tens of thousands of new handloading converts.

I have explained many times that velocity has always had a mysterious hold on the American hunter. During the early days of wildcatting, a cartridge was simply assumed to be better if it was faster than its contemporaries. I'll have to confess that many of us thought home reloading was a way to increase velocity. At that time, ballistic data was not on every sports store shelf; a 1950 Belding & Mull Handbook on handloading ammunition represented my entire ballistic library.

By the mid-1950s, trying to outdo factory velocity readings was in vogue in my area. We know today, however, that that is the wrong approach. The problem was that we had no way of actually measuring the velocity of the fodder we were cranking out. We judged our loads according to figures given in magazine articles and a few reloading manuals.



When Herter's offered a chronograph for approximately \$150, I emptied my reloading gear cookie jar and bought one. The first two days I had it I showed it to a half dozen reloading buffs. I took enough orders at a dollar a shot (the wire screens cost about 10 cents each) to offset much of my expenditure.

### Unfortunately

Unfortunately, things didn't work exactly as planned. The Herter chronograph was accurate, but I had problems with bad screens and poor hookup connections. The screens looked much like the screening used in screen doors, except one wire wove continuously through the grid wires. It was impossible for a bullet not to break the continuous wire when it hit the screen but, because of defective screens and poor connections (alligator clips), only about one shot in five produced a reliable reading.

I stuck with the Herter for several years and then bought an Avtron K-233. The Avtron used plastic screens, with a continuous paint line running back and forth across the screen. When a bullet broke the paint line, a reading registered on the Avtron's readout panel.

**THE HERTER** chronograph, which Lewis used for years, required the use of special screens that had to be replaced after every shot. It was a slow process compared to what can be accomplished with today's equipment.

This readout figure was checked against an interpolation table to get a reading in feet per second.

The K-233 was dependable and consistent, but when the manufacturer stopped making chronographs and screens, I was forced to retire the instrument. I have no idea how many hundreds of tests I conducted on the K-233.

The chronograph is a fairly modern invention, but measuring velocity dates back over 300 years. Sometime during the middle 1700s, Benjamin Robins invented the ballistic pendulum. Without getting too involved in the technicalities of the pendulum, old drawings show that it was a hanging block of metal that was pushed backward when struck by a bullet. According to my ballistic friend Ken Mollohan, a lightweight object was placed behind the block. When the block swung back, it shoved the object back as far as the pendulum swung. When the pendulum moved forward, the straw or whatever light object was used remained. Using mathematical formulas, the velocity could be calculated based on the distance the object was pushed back by the pendulum.

I'm certain this was a crude process, but it does show that early gun makers were concerned about velocity and energy. Sometimes we think that back then it was just a matter of pouring powder in the muzzle and firing. Far from it; the gun buffs of that time period didn't have the sophisticated equipment used today, but they weren't completely ignorant of ballistics, either.

Today, chronographing is within the





reach of every shooter. There are at least a half dozen manufacturers, including Oehler, Custom Chronograph and PACT, Inc., just to name three. I must admit that my experience with chronographs over the past decade has been with the Oehler products.

For over ten years I enjoyed excellent results with the Oehler Model 32 Chronotach Skyscreen System. It consisted of the Model 32 Chronotach and the Model 61 Skyscreen system. Just recently, however, I obtained the new Oehler 35P chronograph, complete with the Skyscreen III system.

With the Model 32, the first skyscreen box is placed approximately ten feet from the muzzle, for high velocity rifles. The second box is placed exactly ten feet from the first box. This setup gives an instrumental velocity reading at 15 feet—ten feet to the first box, and half the distance (five feet) between the screen boxes. The Oehler Model 35P is much more advanced.

The Model 35P is equipped with a printer that uses ordinary adding machine tape. Unlike most chronographs, the 35P prints out two readings on the tape, along with the shot number. One reading is the primary velocity, and the other is the proof velocity, which I will explain later. At the end of a series of shots, the summary button is pushed, and the 35P prints out the highest velocity, lowest velocity, total spread, average velocity and the standard deviation. There is also an editing mode which provides a replay of the velocities in the group, and allows the user to omit one or more velocities from the summary.

The 35P uses three skyscreen triangles (called channels). The start and stop triangles (the primary screens) are only four feet apart, and there's a proof triangle at the halfway point. The instrumental velocity reading is taken at 12 feet—ten from the muzzle to the first triangle and half the distance (two feet) between the two primary screens.

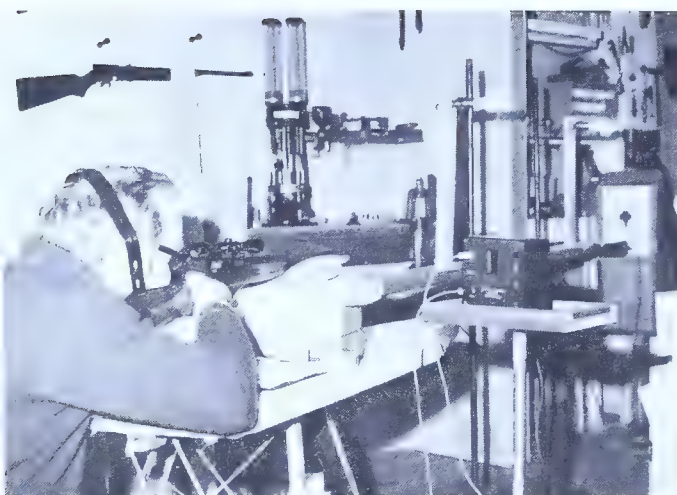
Screen spacing is important, hence the reason for the middle channel or proof channel. In fact, Oehler offers a



**SHOWN HERE with Joe Skursky, Lewis found the Avtron K233 to be a dependable and consistent chronograph, although plastic screens had to be replaced before each shot.**

special rail for holding the channels, and it is marked at the halfway point for the middle or proof channel. In the instruction book for the 35P it states that theoretically, the proof channel should read the same velocity as the primary channel. The primary channel velocity is the reading between the total screen spacing of four feet. It goes on to say that every bullet should shoot to the same hole, but this is only theory, too. At this point, Dr. Oehler dispenses with theory. He says that in actual shooting the proof channel velocity will differ slightly from the primary velocity. The differences between the two velocities on each shot are caused by small measurement errors. The size of the differences are comparable to the sizes of typical errors in your velocity measurements. The primary channel is typically twice as accurate as the proof channel because it uses twice the spacing between screens—four feet compared to two feet. I found the primary velocity to be slightly higher than the proof velocity.

When the screens are spaced properly, the proof channel velocities should read very near the primary velocities. The proof channel emphasizes the importance of accurate and adequate screen spacing. You might not know why you have a significant difference in velocity readings, but the proof channel



**CHRONOGRAPHING** a 22 rimfire in his test shop (note bullet trap), Lewis is using an Oehler Model 32 Chronotach Skyscreen system. With screens placed five and ten feet from the muzzle, this device measures instrumental velocity at 7½ feet.

will alert you when there is an abnormal difference in velocity readings. Dr. Oehler claims the proof channel is a tough instructor and rigorous scorekeeper. The proof channel can't measure screen spacing, but it does obey the laws of physics, and it also rewards careful users.

It's common practice for shooters to fire only three to five shots in a velocity test. I am guilty of doing this, and I'm also guilty of suggesting that just a few shots are sufficient to get an average velocity reading. Actually I have to admit that a 3- or 5-shot test will give an indication of the average velocity, but more shots are necessary to show the true average velocity.

### **For Example**

For example, I fired a 3-shot test that produced the following velocity readings: 3028, 3010 and 3017, for an average instrumental velocity reading—at 12 feet— of 3018 fps. Note the extreme spread is only 18 fps. This looks very good, and many shooters would consider the load consistent, and consistent velocity means accuracy.

But when I fired seven more shots the picture changed drastically. The read-outs from the seven shots were 3058, 3025, 3098, 3070, 3080, 3041 and 3002. They range from a high of 3098 to a low of 3002. The average velocity for the last seven shots came out to 3053 fps. That may not be significant from a velocity

standpoint, but note the extreme spread is 96 fps. The average velocity for the total ten shots is 3043 fps, with a total spread of 96 fps, not the 18 fps difference obtained initially.

It was sheer happenstance that the first three shots fired were so close in velocity readings, and it illustrates how testing with just a few shots can give misleading results. The remainder of the string of ten shots gave a more realistic picture. The serious handloader may want to run the string to 20 shots.

Talking about instrumental velocity instead of muzzle velocity may be a little confusing. Muzzle velocity can be determined from the instrumental velocity by adding on the velocity lost during the first 12 feet. By looking at tables provided by the manufacturer, you find the velocity lost in the first 100 yards for your bullet at your approximate velocity. Dividing this velocity loss by 25 gives a good idea of the velocity loss in 12 feet. The number is not exact as the rate of loss changes with velocity, but it is close enough for our purposes.

Most shooters and hunters are interested only in the average velocity. For instance, the three shots in my first test gave an average velocity of 3018 fps. Dr. Kenneth Oehler thinks standard deviation is more important. He says that standard deviation and average go hand in hand. I have explained what average velocity is, and we all know that some shots will be faster than the average while others will be slower. Let's say that average represents the middle.

Dr. Oehler says the confusion doesn't come until someone asks if the velocity is uniform. While we are quite comfortable in quoting the average, that figure doesn't tell the whole story. The average says nothing about how much the velocity readings ranged above and below the average. How do you describe uniformity or assign it a number grade? The



standard deviation, according to Dr. Oehler, is the number which describes uniformity. The smaller the standard deviation, the more uniform the velocity. Zero would mean that all readings were the same. A standard deviation of 28 fps means you expect two-thirds of the individual velocities to be within 28 fps of the average.

Standard deviation is the best measure of uniformity, and it fits recognized statistical procedures and equations.

To get a clearer picture of this, I fired a 10-shot test of Hornady Frontier factory 53-grain 22-250 ammo through a Ruger Number 1 with a 26-inch barrel. Average velocity was 3630 fps with a 32 fps velocity spread during the test. More amazing, however, is that the standard deviation was a mere 9 fps, which means that two-thirds of the shots were no more than 9 fps below or above the mean. This should quell some of the myths that factory ammo is not consistent.

To change this from instrumental velocity at 12 feet to muzzle velocity, I looked in the Hornady Handbook of Cartridge Reloading and found that a 53-grain hollow point bullet leaving the muzzle at 3600 fps drops to 3163 fps at 100 yards, or loses 437 fps. Dividing 437 by 25 comes up with a little over 17 fps. Adding this to the instrumental velocity increases the muzzle velocity to 3647.

CHRONOGRAPH      Model 35P Oehler  
Skyscreens          Skyscreens III  
Velocity reading at 12 feet

**TEN SHOT TEST**  
by Don Lewis

Hornady Frontier Factory 22-250 ammo.  
53-grain Hollow Point Bullet. Fired in:  
Ruger No. 1 26-inch heavy barrel.

PRIMARY READING	PROOF READING
3631	3611
3642	3623
3630	3608
3629	3608
3647	3624
3632	3611
3619	3597
3631	3611
3627	3608
3615	3593
3647	High Reading
3615	Low Reading
32	Spread
3630	Average Velocity
9	Standard Deviation

The Oehler 35P is a very sophisticated instrument, and it is capable of giving a detailed account of a large number of shots. It's more than just a velocity measuring device, and should be a boon to any serious handloader. In fact, it adds a new dimension to the world of reloading.

**EVERY LITTER BIT HURTS.**  
Please, while you're out enjoying our fields, forests and waterways, don't leave litter behind, and if you should find debris left by someone else, pick it up—before something else does—and dispose of it properly.

Hal S. Korber



# *In the wind*

bob mitchell



The Wyoming Game and Fish Department is continuing experiments with a "bio-bullet" designed to vaccinate elk and cattle from brucellosis, a bacterial disease that causes stillbirths, calf mortality and abortions in both animals. Elk vaccinations take place on wintering grounds, where the animals are first marked with paint—so vaccinated and unvaccinated elk can be distinguished—and then vaccinated. Both the paint and the vaccine are propelled by a gun powered by compressed air from a scuba tank. The bio-bullet is effective at ranges up to 50 yards, but the paint balls are effective only to 20 yards.

**Georgia and Florida, where resident senior citizens may hunt and fish for free, recently agreed to also allow senior citizens (65 years or older) from each other's state to hunt and fish without having to buy any licenses.**

For altering resident licenses, which cost \$30 each, and then selling them as nonresident tags for \$500, a license issuing agent in Oregon was sentenced to six months in jail, placed on five years probation, lost his right to possess or use any firearm or weapon, and was assessed a variety of cash penalties that included \$4347 in restitution to the state Department of Fish and Wildlife.

Responding to a pilot's report of 20 dead Dall sheep at a park in Alaska, a biologist investigated and found that the animals had been killed by a pack of five wolves. The sheep appeared to be in good condition. It's thought that the wolves just happened to catch the sheep while they were crossing a drainage containing no escape cover.

During Maine's six-day moose season last year, 1000 permit holders took 930 moose, a new record. The heaviest moose taken weighed 1015 pounds field-dressed. The largest rack had a spread of 66 inches and came from a 960-pound bull taken by a 13-year-old hunter.

Road salt costs only \$25 a ton and is used as a deicer on 1½ million miles of streets and highways every year. As reported by National Wildlife, however, when the structural damages to auto bodies, highways, and bridges, and the environmental damages to ground-water supplies and waterways are considered, the actual cost of a ton of road salt amounts to \$1600.

As a result of a 3-year federal undercover investigation of commercial hunting operations in Texas, approximately 200 people, including 22 guides or owners, are facing criminal charges for violating waterfowl hunting regulations. Undercover agents investigated 41 commercial hunting businesses, noted violations on 92 percent of the hunts they observed, and documented more than 1300 violations overall.

The Arkansas Game and Fish Commission recently released a report summarizing the activities conducted by their 125 officers in 1987. In addition to law enforcement work the officers: presented 567 programs to youth groups and another 473 programs to civic groups; helped teach more than 600 hunter and boater education classes; gave 244 radio and television interviews; wrote 509 newspaper articles; responded to 1794 nuisance animal complaints and 1343 reports of injured wildlife; answered 2818 reports of roadkilled wildlife; responded to 1980 requests for assistance from other law enforcement agencies; provided help with fish and wildlife management on 928 occasions; and enrolled 1654 cooperators in the state's Acres for Wildlife program.

ANSWERS:

I K H N T F E Y A T S  
THINK SAFETY





**Pennsylvania Big Game Records, 1965-1986,** features the state's official white-tailed deer and black bear records, plus dozens of stories and hundreds of photos related to the trophy hunts. Order this 237-page hardcover book from the Pennsylvania Game Commission, Dept. AR., 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Price is \$10, delivered.



***Last Glance***, by Jack Paluh, is the seventh limited edition fine art print available through the Game Commission's Working Together for Wildlife program. As with previous editions, *Last Glance* is limited to 600 signed and numbered prints. Image size is approximately 15 x 22½ inches, printed on acid-free 100 percent rag paper. Price is \$125, delivered; framed prints are an additional \$97.50. Limited numbers of 1986, 1987 and 1988 prints are still available. Order from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.



# PENNSYLVANIA **GAME NEWS**

MAY 1989

ONE DOLLAR





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# The Road Before Us

THANK YOU, ladies and gentlemen, and welcome to our commencement exercises. We appreciate and are honored by your attendance.

Nine months ago we came to this class as individuals from different walks of life, with little knowledge of the road before us. From the start it was apparent the training would be intense and rigorous.

Beginning at 6 a.m. with physical training and daily duty assignments, our days consisted of up to eight hours of classroom instruction followed by several hours of preparation and review. Subjects included wildlife management, law enforcement, public relations, and many others too numerous to mention. The training routine not only exposed us to vital information, but also taught us *how* to learn—a process that will undoubtedly continue to mold us into better, more professional officers throughout our careers.

Long gone are the days when a game protector was recruited, handed a law book, badge and revolver, and assigned a district. In contrast, today's officer possesses a broad base of knowledge and skills to serve the demands of a rapidly changing society; a society causing unprecedented changes to our planet. Reflect on the changes that have occurred since the founding of our nation, or since the turn of this century, or even within just the past decade.

While you ponder these changes, I would like to paraphrase Peter Steinhart, essay columnist for the National Audubon Society. He stated that Eastern societies have long stressed the need to experience life by the soles of their feet. Western societies, however, experience life by the seat of their pants. With this concept, western man has isolated himself in technological conveniences. Functioning in a sheltered microcosm, we are rapidly losing contact with the natural world, along with the awareness and appreciation of wild places and wild things. Given such a loss, what does the future hold for mankind?

We as wildlife conservation officers serve primarily as a deterrent to violators of the law. Moreover, we must don the role of educators in a rapidly changing world. Too little emphasis is placed upon environmental awareness. Awaiting us is the challenge of providing insight and instilling knowledge about the natural world to those with inquisitive minds.

Most of us realize that habitat is the key to wildlife survival. Yet food, cover, water and space continue to be lost at an unparalleled rate—40,000 acres per year in Pennsylvania alone. A burgeoning world population of five billion people, threading a network of asphalt and housing remains the primary cause for these losses.

Along with maintaining habitat, we must be conscious of the constitution of a healthy environment, with clean air, water and soils in abundant supply. These standards continue to erode from such nemeses as acid rain, toxic and solid waste disposal, and other forms of pollution, but we must remain eternally optimistic, for optimism is the impetus for change.

This class represents a new edition to the select few who have been chosen as wildlife guardians. These guardians have been labeled as the "Fine Green Line" between wildlife and those who seek to exploit it. My classmates and I eagerly await the challenge of this unique guardianship. Today we venture forth with the skills and knowledge we have been given, to faithfully serve the people and the wildlife resources of this Commonwealth.

In conclusion, we wish to thank all those who played a part in shaping this class, and the families and friends who endured many sacrifices and yet provided much needed support during these past nine months. Personally, I wish to thank my fellow classmates for selecting me to speak on their behalf.

In parting, I wish to call upon all commissioned officers from previous classes, along with everyone else here today, to join in a rededication and commitment to the preservation of the wildlife resources that inhabit this fragile planet we call earth.

Thank you.—*Commencement address by WCO Keith A. Snyder, spokesman for the 20th Class of Pennsylvania Wildlife Conservation Officers.*





**A FEW MINUTES** later, a distant gobble came from the flats at the base of the hill. What's going on here, I thought, am I being surrounded by turkeys? Then I realized they must have flown from their roost to the bottom.

# Marvelous Morning in May

**By Copley H. Smoak**

**T**USSEY MOUNTAIN is known to have wild turkeys. But spring had arrived and there was no gobbling. I heard yelps, clucks, and even the suspicious putts of a spooky old hen, but that unique exciting sound, uttered by the male of the species, had yet to jangle my auditory nerve. May mornings are marvelous, even when the woods don't ring with turkey talk. Nevertheless, the majestic birds were around, for there was definite sign about. Dawn of the new day would tell the tale. That's when the gobblers first announce their availability to prospective mates.

A sliver of pink creased the eastern horizon as I hustled from camp. At least 15 minutes late, I figure age undoubtedly must be affecting my internal wake up mechanism. I must purchase an alarm clock, I remind myself. Although anxious to reach the mountain well before daylight, I paused at a patch of or-

chids, to mimic a great horned owl. For some reason, gobblers often respond to a hooting owl. After catching my breath, through cupped hands I called, "WHO—Who—WHOOOOOOOAH!" The piercing hoot was answered immediately. High from the mountain yet distant, the unmistakable response drifted in on the cool, heavy night air.

## **Away I Scrambled**

Away I scrambled to close the gap in the lingering darkness. Jogging up an old logging road to within striking distance, I hesitated long enough to hear, not one, but two raspy old gobblers. They had roosted in big timber, below the rock outcrop line. Creeping along a deer trail, I pushed in as close as I dared, before hiding in a brushy pile of rocks. They gobbled in tandem while I tried to anticipate where they would sail down. It was already too light to move,

so all I could do was wait and listen. They were making such a ruckus I couldn't tell if they were answering my most seductive yelps or just shouting back and forth at each other. Then our exchange was interrupted by a clear, hen call. I couldn't tell if it was another hunter or an actual turkey. Then everything got real quiet.

A few minutes later, a distant gobble came from the flats at the base of the hill. What's going on here, I thought, am I being surrounded by turkeys? Then I realized they must have flown from their roost to the bottom. Gossamer-like, they were neither seen nor heard. But they had to have been the same birds, for the ones on the mountain never made another sound.

### A Bit Vexed

A bit vexed, I headed downhill toward the intermittent gobbling, moving carefully and quietly in the cover of some early leafing spicebush, which blanketed a damp drainage plain. The rocky wet ground played out into a big open hardwood bottom, where the birds were.

Hiding this time in a lone patch of honeysuckle, I waited. Then my best five-note lilting yelp was challenged immediately. "GEEOBLE-OBLE-OBLE!" Peering through the vines to

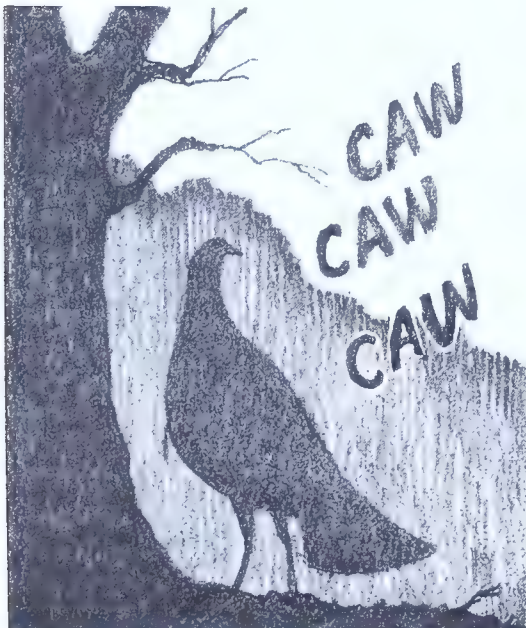
perceive that puffed up, wing dragging, boss gobbler tipping my way brought nothing but dry eye sockets. He was not far, but never in sight. My fine feathered friend answered my invitations, but he wouldn't come in. Finally, all that could be heard was wind blowing through the newly budding trees.

Frustrated, I headed slowly toward the last reply. Some hundred yards from my honeysuckle hideaway, a hidden basin cradled a running brook in the big timber. This geological depression had obscured the birds from my sight. Fresh scratching in dry leaves pointed downstream. Soon the sparkling run left the forest and split a long, narrow greening meadow. Little blue flowers nodded in the stiff breeze on the edge where I sat under a giant oak, eating an apple, contemplating my next move. Nothing had worked so far, but breakfast would just have to wait.

Leaving the apple for a deer, I rose to my feet, took a deep breath and cawed loudly, like an agitated crow. An instant double gobble rang out from the recently timbered woods across the meadow. "GEEOBLE-OBLE-OBLE, GEOOBLE-OBLE-OBLE!" The hunt was still on. Quickly crossing the meadow into the cutover, I hid in a briar thicket.

The rotting tops and lush regrowth in the timbered area limited vision, but at least I was in the same patch with the big bird. Crouched in the briars, with call in my mouth, a bellowing gobble almost shook the ground before I could make a sound. I shouldered the 12 gauge just as the bright head came bouncing through the brush. Covering it with the little ivory bead, making sure the bird sported a beard, I pulled the trigger. Sounds of thrashing and flapping filled the air, with feathers and leaves following. Jubilantly, I rushed to check out the wonderful commotion. Several high velocity number six pellets had found their mark.

**I ROSE to my feet, took a deep breath, and cawed loudly, like an agitated crow. An instant double gobble rang out from the recently timbered woods across the meadow. The hunt was on.**





This was surely the one I had come for. Sporting a copious beard and pointy black spurs that adorned long, dirty pink legs, he was a bronze beauty. Probably weighing 17 or 18 pounds, the old boy felt more like 25 or 30 before we got back to camp. What a great feeling to be lucky enough to take such a prize, but just being out there trying to out-guess them is more than enough for me.

Maybe some of us call too much, and maybe we often hunt areas without knowing the exact lay of the land—which is a definite disadvantage. But old gobblers do unpredictable things all the

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For a Friend . . .

time. So, why not be unpredictable right back. If he won't come to the most alluring hen calls, sounding like a crazy crow, a raving raven or a screaming hawk just might work. Furthermore, it must have been a turkey hunter who first coined the slogan, "Persistence Pays."



*J.M.*  
*ROEVER*

*It's with deep regrets that we report the untimely death of long time Game News artist and illustrator Joan "J.M." ROEVER. Joan's artwork has graced our covers and complemented our features since 1967. The former Philadelphia native resided for the past 32 years in Florida, where she and her husband Wilfried, a former engineer at Cape Canaveral, turned their four-acre property along the Indian River into a nature preserve. In addition to her contributions to Game News and many other accomplishments, Joan authored and illustrated 13 children's books, and created nature dioramas for wildlife museums in Louisiana and Mississippi. She was listed in "Who's Who of American Women" and Who's Who in American Art," and was a member of the "Society of Animal Artists," a worldwide guild of 200 members chosen on the basis of their work.*

# A Grouse Earned

By Nancy Marie Brown

I HAD OFTEN walked in the fall woods, the grouse woods, and had often been startled, while gazing at a rain pool on a carpet of still-waxy aspen leaves, by the thrum and thunder of a grouse bursting up—as if my idle step had hit a hidden spring and launched a handful of leaf-strewn earth. Sometimes I had even, whimsically, raised my arm like an over-under and popped at the bird as it hurtled down the path ahead of me. It always flew straight down an open path, staying in sight long enough for me to remark on the bands in its tail, and guess at it being a hen or a cock. But today was different. Today, for the first time, I was carrying a gun.

## Great Compliment

I had been looking forward to this day for months. It had seemed a great compliment when my husband asked me to join him in what I'd always considered a men-only enterprise. That, combined with my love of thickets and woods in their bright October colors, and the fact that I'll take roast grouse over the finest Maine lobster any day, kept firm my desire to hunt. The summer's humiliating trap-shooting sessions, however, when my husband's friends praised me for hitting two out of ten—and the times my husband himself put on an expression of terror if I wasn't constantly careful about exactly where the muzzle of my shotgun (loaded or not) was pointing—left me somewhat apprehensive.

Now, on the hilltop, the russet leaves became barriers, screens. I walked bent over, my eyes narrowed against the lashing of thorny berry branches, and peered around the edges of each screen. I then parted it and peered around the next one. Who cared if it was gold or fire-red or still green when it clutched at my gun, or made me stumble and

stop, charged and tense? Was that just my own racket? Or a flushing grouse?

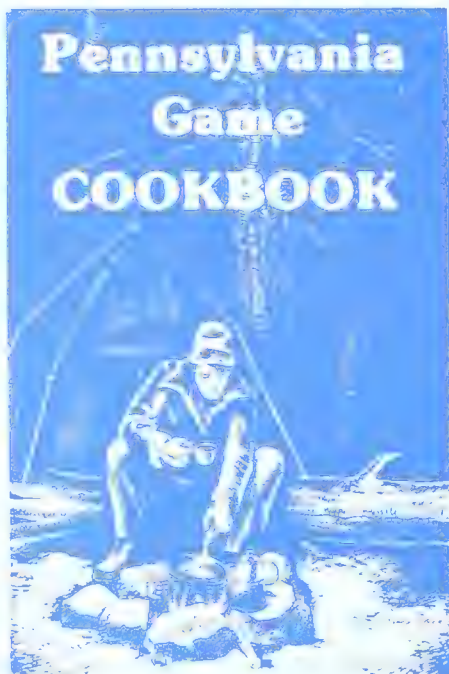
The thicket was thornapples and raspberry canes studded with tall pines. Bent over, I'd be fighting with a pine tree's lowest boughs when a burst of wing-rush would tell me a grouse was jetting—unfairly—out of that very tree-top, far above my eyes. My husband would shout "Bird!" and I would half-rise, extricating myself from the trees, and search the brambles for the orange of his vest and make sure the muzzle of my gun was pointed the other way. Then I'd peer around the next leaf screen, as if I'd have any better chance of shouldering my gun if another grouse burst out. Where had the long, open paths of those gun-less years gone?

At the edge of the hilltop thicket, where I could at last straighten, the valley opened out like a lap, soft and undulant, comforting in its reds and browns and tans, and so small from this high, mountainside perspective. Each twig that had blocked my sight had held a world behind it—a world full of flushing grouse and clutching brambles and the persistent question that if, somehow, the grouse did fly into the open and I could raise my gun past the brambles: would I shoot? I'd never shot at any living thing before. I wasn't at all sure the decision would be automatic. The valley, in contrast, was small, delicate, far away, pretty in its fall dress. It could fit on my palm. I could tip it and make snow fall. Then my husband flashed a hand—we were not here to sightsee. I turned my back on the little valley and bent over to wind into the dark, foul-playing thicket. Again, the thicket that was taunting me, as if it knew I would never shoot its grouse, what with the struggle of raising my gun through its branches and the time I'd lose when I









**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by GAME NEWS readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from GAME NEWS office.

paused. Not only is this a good shot, I wondered, but do I really want to kill this bird.

We crossed and recrossed the thicket and heard plenty of grouse, but neither of us got a shot. It was growing late and I was tired from fighting the brambles. I was ready for a soft chair, a snapping fire and a cup of hot tea. My husband, who had been silent and rather off on his own all day (which surprised me; I'd imagined us romantically strolling through the woods together with our shotguns on opposite arms), had broken his shotgun and hooked it over his left forearm. His back to the valley, his gaze was fixed over my shoulder like a lumber jack sizing up a tall forked tree. He lifted his cap and replaced it. "I'll drop

down along the edge of the hill," he said. "You go back through the center." He eased the gun closed and ducked under the nearest branch, his orange vest a semaphore. I bent my back and wormed in, all interest in hunting having fled. My gun was more useful as a machete, to sweep berry canes out of my path.

His shot broke the stillness.

I opened my gun, cradled it, backed out of the thicket, which now seemed to let me pass, and jogged for the sound. At the border of the open woods, just where the branches thinned and the spaces began to broaden, my husband stepped, face flushed, from behind a tree. "You pushed it out of the pines. I may have hit it, but I didn't see it go down. Check behind every stump, every fallen branch. Keep your gun loaded in case it—or another one—goes out." He sidestepped down the hill, rustling leaves.

My gun's action latched like a softly closed door, and the stock, now familiar, felt warm in my hands. There was a bird on the ground. I need only find it. As I walked ahead, not thinking of shooting, the grouse woods regained the beauty I'd seen in years past, the beauty that had sparked my interest in grouse hunting in the first place. The leaf mold was kaleidoscopic. The trees blacked out neat stripes of sky. A bleached, barkless log traced a pointing finger. The ground pine was ripe: Clouds of its olive-colored pollen puffed at my footsteps.

The grouse burst from the green laurel beside me, rattling, beating the air with its wings. The butt found my shoulder—I recall this in slow motion—my cheek pressed against the stock, it cut into my cheekbone, I turned, counter-clockwise. The grouse arced along the hill's curve—safety off—it entered a tree corridor, flew black against the sky, a target, then tumbled, clockwise, and dropped from sight. I took a step and the tension and surprise rushed up out of me in a shout—I don't remember what I said. My palms were wet, my face a grin. "Good shot!" my husband answered. The report still echoed in my head. I broke the warm gun, shell and



smoke popping out, and tucked it to my side. I hurried toward the bird, all at once quite at home in this stubborn, beautiful woods.

We veed from two sides of a tree and came upon the grouse, still struggling and warm, its tail spread into a russet fan edged in silver and coal, its eye soft and round above the curving beak. I stared, stiffening, and then it disappeared, camouflaged by the leaves. For an instant, I regretted the shot. It hadn't been a clean kill, and so opened up an awesome spread of possibilities. I would not find it again, it would suffer. Broken-winged, a fox would eat it. I felt cold air like a hand on the back of my neck: I supposed I'd have to shoot it again.

**WE VEED from two sides of a tree and came upon the grouse, still struggling and warm, its tail spread into a russet fan edged in silver and coal, its eye soft and round above the curving beak. I stared, stiffening, and then it disappeared.**

"Here." While I was standing there, startled, my husband caught the bird and broke its neck: I hadn't thought of that. He offered it to me, neck feathers matted, a drop of blood by its eye, then slipped it into my game pouch when I hesitated. He smiled fondly, having learned this lesson long before, and I was suddenly back 20 years, to the time I'd asked my father not to fillet the big redfish I'd caught. We'd brought it home in a bucket, to show mother, and tethered it to the dock for hours waiting. We later released it into the bay—only to learn that the neighbor caught it and ate it the next day.

"What a shot!" my husband was saying. "Won't everyone be surprised. You hit the first one you shot at! Nobody does that. Can you remember how it went? Where it came up?"

"Behind that laurel," I said, pointing back, "and you were down there. I had

just taken a step—I was looking at the ground pine. My left foot was forward, like you told me to stand. And it came out. It flew over here, through the trees—see the gap? I shot it right there. And it went down."



Retelling it, seeing the bird spinning down, flashing dark, flashing light, the tail fanned, the quiet eye, feeling its weight in the pouch on my back, I began to see what the grouse had taught me: You must acknowledge the birds you shoot. You must pick them up, feel their warmth, see their heads loll, carry them home on your back. You have to accept the responsibility, immediately, without excuse, for a reaction that was automatic, instinctive—for raising your right arm, whimsically or not, to pop at that flyer and knock it down. And with that realization, the weight on my back transformed itself from the carcass of a pretty bird into dinner, to the first food I had truly earned, and I knew it was going to taste exquisite.

I turned and looked back up the hill at the tangled, red thicket; my husband was behind me. "My grouse," I said. "Will you get it back out?"

# New Light on an Old Problem

By Wendy Plowman

**I**N THIS DAY and age it seems any environmental news is bad news. And with acid rain, toxic wastes, habitat loss and a host of other problems, there's plenty to be concerned about. But there is some good environmental news, too. Progress is being made in many areas. This is about one such case in which government agencies and private industry cooperatively developed and implemented a daring plan that turned an environmental eyesore into a healthy, productive natural resource.

For many years a serious acid mine drainage problem has been polluting

tributaries of Little Pine Creek in Lycoming County. The pollution originates from an abandoned deep mine on State Game Lands 75.

Like many other upstate tracts, the 25,039-acre game lands is primarily mountainous and heavily forested. It's best known for bear, deer, turkey, squirrels and ruffed grouse. Underlying this game lands, however, is an isolated bituminous coal deposit, one situated far from traditional coal country. The Game Commission owns all rights to SGL 75, with the exception of 1000 acres where the mineral and mining rights are owned by private mining interests.

To the Game Commission, this coal deposit was an environmental headache. Agency land management personnel were stymied over the acid mine drainage emanating from this game lands. Periodically, for over a century, the coal deposit had been deep and surface mined by a series of private owners. Much of this mining was carried out before the early 1970s, under old mining regulations that required only minimal and often haphazard reclamation.

As a result, hundreds of acres on SGL 75 resembled moonscapes, pock marked and denuded. It was obvious there hadn't been much chance or thought for revegetation since the original, fertile topsoils were buried during coal removal operations long ago. Little or no erosion control or stream **PERIODIC deep and surface mining of an isolated coal deposit on SGL 75, Lycoming County, left a denuded landscape and caused an acid drainage problem that has plagued resource specialists and sportsmen for years.**





tection existed either, allowing surface runoff to choke nearby streams. That, coupled with acid mine drainage from flooded abandoned mine shafts, eventually destroyed two upper tributaries of Little Pine Creek, Otter and Buckeye Runs.

According to John Arway, Fisheries Biologist with the Pennsylvania Fish Commission, Otter Run was once a prolific native brook trout stream. Investigations conducted in November 1977, however, showed that Otter Run was polluted from its headwaters to mouth by active and abandoned mining discharges. Specifically, a report of December 7, 1977, stated, "an abandoned deep mine discharge, near the Fisher Mining Company operation, was discharging acid water which was, at least in part, responsible for the polluted conditions found in Otter Run. Fishes were restricted to the lower section of the watershed near Little Pine Creek, where dilution and higher alkalinity buffered the adverse effects of acid mine drainage."

Until the 1940s scant attention was devoted to curtailing damage caused by mining operations. The deep mines on SGL 75 were essentially shallow horizontal tunnels with coal pillars left standing to hold up the mine ceiling. Traditionally, miners would dig exploratory pits along a hillside to locate a seam's low point. From there they would tunnel into the mountain on a gentle uphill angle. Water encountered in the mine simply drained downhill and out into a nearby stream. Unfortunately, on its way out of the mine, the water usually turns to sulfuric acid and ferrous hydroxide because it mixes with oxygen and a yellowish mineral commonly found in mines, pyrite.

In the early 1970s the Fisher Mining Company was purchased by John and Steve Blaschak, owners of a family business with extensive mining experience

**JOHN BLASCHAK points to the coal seam his company is currently mining. During this recent operation, a daring plan was developed that turned the environmental eyesore into a healthy, productive natural resource.**

in the anthracite fields of Schuylkill, Luzerne and Lackawanna counties. Now based in Williamsport, the new company has been mining on SGL 75 since 1972. By 1985 they were fast approaching the point at which the Department of Environmental Resources would not renew their mining permit because they were nearing a polluted pool remaining from an old deep mine. Causing a leak in the old pool could increase mine acid drainage problems, and even though the new Fisher Mining Company wasn't responsible for the old pond, they were liable for any damages it caused due to their mining activities.

As the company's operations advanced toward the abandoned deep mine, however, stream monitoring reports indicated that their mining program might be having a corrective effect on the existing acid mine drainage, apparently by diverting surface and ground water away from the site. The Game Commission studied the situation carefully to understand the positive effects the new mining operation was having on the old acid mine drainage





**AFTER A LAYER of topsoil was placed on the field on the right, grass was planted. Trees will be planted next, and the area will eventually be forested, making excellent wildlife habitat.**

problem. It was at that point Game Commission specialists saw an opportunity to correct a long-term problem, using the present mining operation. They went to work with Fisher to bring about a carefully designed and expanded surface mine operation that showed promise in solving not just the drainage problem, but also the reclamation of the long abandoned surface mines as well.

The federal Surface Mine and Reclamation Act of 1977 paved the way for the existing state mining rules and regulations. Essentially, Pennsylvania mining laws state that if a mining company encounters a deep mine discharge and makes the discharge worse, it inherits an ongoing liability to treat and improve the acid mine discharge to the mineral content standards required by law. This stipulation can put a mining company out of business, because of the high cost of fixing a problem they themselves didn't create. There is a provision in Pennsylvania's mining regulations, however, called a Sub-Chapter F Agreement, that provides a way around this

stipulation. With Pennsylvania Department of Environmental Resources permission, and with a prearranged analysis to determine what are called "target abatement levels," a mining company can go into an area, and for the benefit of reclaiming the abandoned surface mine sites, remine the area using the best available technology. Under such an agreement, the mining company may not be held liable for the perpetual treatment of preexisting acid mine discharge. Of course, they are responsible for any pollution increases.

The Game Commission and Fisher Mining Company agreed to work together in an attempt to further curtail acid mine drainage. At first, the idea met with a lot of skepticism. A project of this magnitude had never been tried before. Many risks were involved, both financial and environmental.

"A number of factors had to fall into place for the operation to succeed," admitted Greg Grabowicz, Chief of the Game Commission's Environmental Impact Assessment and Minerals Division. "We had to carefully look at the



**GREG GRABOWICZ, Chief of the Game Commission's Environmental Impact Assessment and Minerals Division, inspects the mine discharge on its way to a treatment pond, the final step before release into nearby streams.**

economic and environmental factors, and needed to feel confident that the mining company wasn't overestimating the technical problems and costs of the operation. On the other hand, the Fisher Mining Company had to be assured that they wouldn't be held liable for unanticipated problems or costs. Any agreement they signed had to be financially sound. Finally, the Department of Environmental Resources had to be satisfied that environmental benefits would result, before they could issue the necessary mining permits. Through many long negotiating sessions, over two and a half years, an agreement was finally reached."

At the same time, the technical staff of DER's Bureau of Mining and Reclamation was working with the mining company to develop a plan which complied with the state's mining regulations and could be relied on to achieve an acceptable level of improvement in the acid drainage problem. DER, the Game Commission and Fisher Mining Company were very much aware that because of the complexities of ground water movement and chemistry, chronic deep mine discharges are seldom eliminated completely, even with the best reclamation plan. A realistic target improvement level had to be agreed upon. It took two technicians eight weeks to develop a statistically valid model of the annual changes in ground water flows and volumes coming out of the mine. The model provided a base for analyzing the impact of future mining activity on the acid drainage problem.

Using the Sub Chapter F Agreement for their own protection, the mining company agreed to completely dig out the abandoned mine from the surface down, called daylighting, removing remaining coal in the process. Water from the underground polluted reservoir is drained and pumped out into ponds,



where the water is treated for dissolved minerals and acid, then clarified before being returned to nearby streams. The mine is then backfilled with layers of limestone and shale and finally topsoil. After the final layer of topsoil is in place, a revegetation plan designed to provide improved wildlife habitat is carried out.

"Without the Sub Chapter F Agreement there would have been no basis for negotiation," stated John Blaschak, Fisher Mining Company owner, "the risks would have been too great."

Economically, the daylighting operation itself would be a losing proposition for the mining company, because all the profitable coal had already been removed from the bottom seam and all that was left were underground coal pillars. It would be an out-of-pocket expense for the company after mining the remaining seams over the deep mine, to dig down deeper into the abandoned mine and backfill the entire area as they went.

The Game Commission controlled the major bargaining chip. They owned the mineral rights adjacent to the abandoned deep mine. The Commission was able to work out what is called a mineral



**FRED JARRETT, Chairman of the Pine Creek Task Force, once again catches native brook trout in Otter Run, thanks to this novel reclamation project cooperatively developed and conducted by private industry and government agencies.**

Grabowicz explained further, "This is one of the first projects of its kind and magnitude. Without precedent, the first project is usually the most technically difficult, but we can use this example as a blueprint for future projects. We're just completing a very successful first year."

Approximately \$1,250,000 worth of coal rights were leased from the Game Commission. As payment, Fisher will convey ownership of over 7000 acres to the Commission. Plus, the project is designed to eliminate the acid mine drainage problem and a once devastated area will be revegetated.

"We're already seeing indications that the project is a major success. Preliminary monitoring shows 90 percent acid mine drainage reductions, and everyone is confident that we can achieve about an 85 percent reduction on a long term basis," Grabowicz concluded.

If the Fisher Mining Company can achieve the targeted abatement levels the Game Commission believes the mining design can accomplish, the Commission has agreed to look at other areas nearby, where similar acid mine drainage problems exist. The company will be able to lease additional coal in return for carrying out a second daylighting project.

"We are seeing not only substantial environmental gains," Blaschak stated, "but the Game Commission is also coming away with some excellent wildlife habitat." In addition to the Commission's 45,000 trees planted in the wildlife habitat revegetation project, the Fisher Mining Company planted 150,000 trees over 250 acres in fulfillment of state mining regulations.

This reclamation project made everyone a winner. Through projects that offer incentives to private industry, and a willingness of state agencies and the

lease/land exchange agreement with the mining company. In this, Fisher leased mining rights to 60 acres of Commission-owned coal located next to the abandoned deep mine. As payment for the coal the Game Commission received land. In addition to the surface acres turned over to the Game Commission, the mining company also agreed to relinquish their mineral rights to the interior game lands tracts when their surface mining operations are completed. Eventually, the Game Commission will own the entire mountain, including surface and mineral rights. Further, an 80 percent target abatement level was built into the contract. This provided the mining company an incentive to improve the acid mine drainage entering the streams by removing at least 80 percent of its dissolved mineral content.

"When we first began negotiations, everyone was suspicious of everyone else, relates Blaschak. "It took some time to build trust."



private sector to cooperate, major environmental problems can be solved, and state taxpayers won't have to foot the bill for the cleanup.

Fred Jarrett, Chairman of the Pine Creek Task Force and an ardent fisherman, is already beginning to see dramatic improvements in the native brook trout populations in Otter Run. Jarrett and the other task force members are confident that the daylighting project will not only return native brook trout populations to Otter Run, but will also improve conditions in Lycoming County's Little Pine Creek, where Otter Run flows.

"Unfortunately, we must pay for the sins of our ancestors," Blaschak noted. "But where there are economic enhancements to give companies the incentive to participate," he continued, "everybody wins." The companies will come and go—agency employees will

The 17-member Interstate Mining Compact Commission awarded Fisher Mining Company an honorable mention for their efforts in improving the overall environment on State Game Lands 75. In considering them for the award, the mining commission considered the innovativeness of the mining plan, what the site looked like before and after the mining activity took place, and the accomplishments, such as water quality improvement.

Also, the District Mining Office of DER has nominated Fisher Mining Company for their mining reclamation award.

come and go—but the Commonwealth will always be here and the improvements will benefit our grandchildren and their grandchildren."

## Miller Appointed to Commission

**G**EORGE M. MILLER, vocational agriculture and conservation-agriculture resources teacher at Brockway Area Schools, has been appointed to the Pennsylvania Game Commission. A former president of the Pennsylvania Association of Conservation District Directors, Miller replaces Taylor A. "Ted" Doeblner, who resigned from the Commission last October.

In addition to his teaching activities, the new commissioner is owner and operator of the George Miller & Sons Landscaping business, and is also a part-time farmer. He belongs to the Pennsylvania State Education Association, National Education Association, National Wildlife Federation, Western Pennsylvania Conservancy, and many other conservation organizations.

George has undergraduate and graduate degrees from Penn State, and has also studied at the University of Wisconsin. He and his wife Lois have seven children—four girls and three boys—and 11 grandchildren.



**George M. Miller**



**Hunting For One's Food  
Is Closely Akin To Raising It**

## ***The Big Picture...***

**By Vern Achenbach**

**A**GROWING NUMBER of people are questioning the need for hunting. It affects agriculture.

Hunting is agriculture at its most basic level.

Forget the dogma. The state manages a free-roaming herd of deer. They are the property of the state. Individuals are permitted to harvest them to the best of their ability within the rules.

### **Reality**

There is nothing wrong with this. It is reality. Deer are not cuddly toys. The eyes of a doe may be pretty, the qualities of a large buck awe-inspiring, but it makes them no more or less an animal for food than any other.

Deer are just an example of the mil-

lions of species of wild plants and animals that exist. There is much on the edge of the farm and in the mountains that can provide sustenance for man.

People are killers, like it or not. To ignore this or pretend otherwise is idiotic.

Farmers do not raise cows, beef, lamb, goats, pigs and an assortment of fruits and vegetables so that others can enjoy a pretty scenic drive-by or a quaint petting zoo. Farmers raise these plants and animals for consumption.

Farming arose because it was found to be a better way of getting meat on the table than to be always taking to the woods and fields or streams hunting, fishing or trapping.

But never, in any society, did men stop



**FARMERS do not raise cows, beef, lamb, goats, pigs and an assortment of fruits and vegetables so that others can enjoy a pretty scenic drive-by or a quaint petting zoo. Farmers raise these plants and animals for consumption.**

going to the wilds to supplement a domestic diet.

These three activities—hunting, fishing and trapping—are still needed harvesting tools for minimal care agriculture. They are still an integral part of the farmer's repertoire for living off the land.

For some insane reason, a sizeable number of people in the United States just don't believe this. They seem to think that they exist without blood on their hands and in their bellies.

It seems this group of people would like to live an existence as a pure, non-feeding, benevolent god among the creatures of the world.

Snap out of it. This namby-pamby Bambi pandering has gone way too far.

Man needs to bite, chew and swallow animals and plants.

Instead of attacking a basic human endeavor as hunting, these people could be of better use if they would be concerned with something significant, such as monitoring the creation and placement of toxic waste dump sites, preventing the waste of croplands, watersheds and wildlands, or decreasing voter apathy.

Efforts should be directed toward finding answers for real problems, not creating meaningless new problems.

Hunting, fishing and trapping are natural, but controlled, harvests of wildlife.

Not every one needs to hunt to cull the deer herd to maintain a stable population, but someone has to hunt or the herd will outgrow its habitat and become extinct.

The same is true in domestic farming. If a farmer didn't constantly cull his animals, he could soon no longer afford to feed them. They would starve and the farm would go under.

That is one solid, but perhaps over-used, reason why hunting, fishing and trapping is necessary: for population control.



But there are other reasons why the three harvesting sports are good agricultural practices.

The reason we have farms is so that we all can have easy pickings and easy kills, full bellies and good meals.

Then there is wildlife.

Before there was agriculture, all humans hunted and gathered. Farming as we know it was never meant to replace all food sources for men.

Man's dependency on wild, untampered, or minimally managed areas is as strong as ever.

When conditions create a shortage of conventional domestic food resources, men look to wildlife.

### Forget How

But if we stop eating wild things, before long we will forget how.

Furthermore, the survival of plant and animal species depends on society's values.

This is a capitalistic society. We value things based on our need for them.

It is happening across the state. In the competition for land for residential developments versus land for agricultural or wildlife areas, the developments win out because they make more money.

However, farms and wild areas continue to exist. Both are heavily backed by government programs because of the long-term benefits of each.

For domestic plants and animals, a commercial demand exists and there

The author is a staff writer for *The Daily News*, Lebanon, where this was originally published.

is a supply-and-demand correlation; for wild plants and animals, a public demand exists and there is a supply-and-demand correlation.

The way for the American society to keep agriculture and wildculture is to raise the economic values of both activities. It needs to be done now.

The values of domestic food sources are government- and market-controlled. The value of wild and untended areas and plants and animals is only verified through license fees paid by those who practice the "sports" of hunting, fishing and trapping, and by the related support of service industries.

### **Lesson Relearned**

That wildlife needs man and man needs wildlife is a lesson being relearned in Lebanon County.

At one time Lebanon County was known all along the East Coast for good pheasant hunting. That is gone and will never come back. Sorry, but it's done.

If Lebanon were more dependent on tourism, the loss of the pheasants would be devastating to all residents.

Instead, the loss of pheasants was devastating only to the relatively few service industries that catered to the residents and tourists who used to visit local farm fields for the birds.

That hunting is a sport makes it no less a tool of agriculture.

Daily sustenance and survival of most people no longer depends on hunting, fishing and trapping success. Therefore, the activities have become sports.

In other words, the harvest developed into a sport when it ceased being a job.

For gentlemen farmers, the same is now true. Gardening and raising animals is a hobby if a family isn't depending on them for food and survival.

Despite what critics say, hunting is not cruel.

Cruelty is the infliction of suffering

for the sake of personal enjoyment or out of negligence.

Though it could sound cruel, the treatment of domestic animals is not.

Domestic animals are harvested. They are raised within pens, cages or fences and are herded into trucks for delivery to stockyards and ultimately to slaughterhouses. This is efficient.

Domestic meat animals are electrocuted in assembly-line fashion. Meat-hooks are put into the animal immediately after electrocution. The carcass quickly goes through a series of procedures that renders the animals into consumer products.

The procedure looks bad to those who project themselves into the role of a domestic animal. This is natural, but simplistic.

In harvesting through hunting, the process is less efficient than through domestic harvesting.

Wild meat animals are not caged or fenced. They are not given steroids and scientifically select meals.

Deer range freely. The deer know their escape routes and can smell and hear the presence of a man. They are not disadvantaged prey. More importantly, deer are sought by individuals, not companies and corporations. Every law-abiding resident has a right to buy a license to harvest a deer.

If a hunter sees a deer within range of his gun or bow, he must consider the path of the animal and the path of the projectile. A twig or small branch will deflect the arrow or bullet, and the hunter misses the kill. Try to throw a stone into a forest. It doesn't go far.

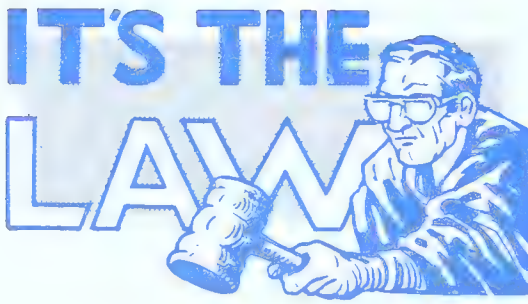
Many people who criticize hunting are so domesticated that they have no understanding of man's relationship to other living things.

These critics of wildlife agriculture do all their living and thinking entirely within four walls. The walls need to be knocked down.

The people need to be educated to reality. They need reality therapy. They need to see that killing an animal is neither murder nor cannibalism. It's getting food.







### Question

How long must a person live in Pennsylvania before he can purchase a resident hunting or furtaker license?

### Answer

A person must have been domiciled in the state for at least 30 consecutive days.

that's what will be tested, by means of a fluorescent-antibody test.

Your first action after a bite or scratch should be to wash the wound and apply some type of antiseptic, alcohol, for example. In addition to rabies, many other diseases can be carried in the mouth and claws of animals. Tetanus is just one.

The dead animal should be delivered to a submitting agency. Wearing gloves, place the animal in a plastic bag covered with ice or ice packs. Do not freeze. A submitting agency would be a veterinarian, physician, wildlife officer, animal control officer, county humane society representative, someone from the county health department, or one of the eight regional offices of the Department of Agriculture. If you have a justifiable reason for an animal being tested, it will be processed and sent to one of the four laboratories in the state.

The laboratories doing the testing are:

#### For Human Exposure Specimens Only

1. Pa. Dept. of Health  
Bureau of Laboratories  
Lionville, Pa. (215) 363-8500
2. Philadelphia Dept. of Health  
(215) 875-5917—For specimens  
in the city of Philadelphia only.

3. Allegheny County Dept. of  
Laboratories  
(412) 578-8070—For specimens  
in the southwest region of the  
state.

For all other exposures, such as to your cat, dog, farm animals.

Pa. Dept. of Agriculture  
Bureau of Animal Industry  
Summerdale, Pa.  
(717) 787-8808

If you can't contact any of the submitting agencies, or any of the above laboratories (as might happen after hours or on weekends or holidays), call the Health Department emergency number, (717) 737-5349, for answers to any questions.

### Vaccinations

Fortunately, rabies is slow to develop and there is some time for testing to be done before a decision must be made on treatment. However, the closer to the head or neck a bite occurs, the more important prompt treatment becomes. While a week may still be enough time for safe treatment on a bite to a foot, treatment should not wait this long for bites to the head or neck. In any case, as soon as an animal is diagnosed as a rabies carrier, treatment should be administered as soon as possible.

Treatment consists of one dose of Rabies Immune Globulin and five doses of human diploid-cell vaccine, given over a four-week period. There is also a three-dose series that is given to persons with frequent exposure to suspect animals, such as laboratory workers, veterinarians, etc. This is not recommended for the average hunter or trapper.

Dogs and cats (except "farm" cats) are required by law to be vaccinated. The exemption of farm cats largely accounted for the 21 cats found positive, and for the many people who had to receive treatment because of exposures to them.

If your cat or dog is vaccinated and it is bitten by a rabid animal, it is suggested that it receive a booster shot as added protection. It should also be *observed* for 90 days. This is not quaran-



## Incidence of Rabies in Pennsylvania, 1988

County	Species												Total
	Bat	Cat	Cow	Deer	Dog	Fox	Grnhog	Horse	Mule	Rabbit	Raccoon	Skunk	
Adams	0	1	1	0	0	0	0	0	0	0	10	4	16
Armst	1	0	0	0	0	0	0	0	0	0	0	0	1
Bedfd	0	0	2	0	0	4	0	0	0	0	8	4	18
Berks	0	0	0	1	0	1	1	0	0	0	30	7	40
Blair	0	0	0	0	0	0	0	1	0	0	3	0	4
Bucks	2	0	0	0	0	0	0	0	0	0	1	0	3
Cambr	0	0	0	0	0	1	1	1	0	0	0	0	3
Centr	0	0	0	0	0	0	0	0	0	0	1	1	2
Chest	2	4	1	0	1	3	7	1	0	1	139	8	167
Clear	0	0	0	0	0	0	0	0	0	0	0	1	1
Clint	0	0	0	0	0	0	0	0	0	0	1	0	1
Cumbe	0	0	0	0	0	1	0	0	0	0	7	2	10
Dauph	1	0	0	0	0	0	0	0	0	0	11	3	15
Delwa	0	1	0	0	0	0	0	0	0	0	19	1	21
Frank	0	0	1	0	0	1	0	0	0	0	8	5	15
Fulto	0	0	2	0	0	0	0	0	0	0	3	0	5
Hunti	0	0	0	0	0	0	0	0	0	0	0	1	1
Junia	0	0	0	0	0	0	0	0	0	0	1	0	1
Lanca	1	8	6	0	2	3	2	1	1	0	85	13	122
Leban	0	1	1	0	0	0	0	0	0	0	11	4	17
Lehig	1	0	0	0	0	0	0	0	0	0	2	0	3
Lycom	1	0	0	0	0	1	0	0	0	0	7	1	10
Miffl	0	0	0	0	0	1	0	0	0	0	1	3	5
Montg	0	0	0	0	0	0	0	1	0	0	6	0	7
North	1	1	1	0	0	0	0	1	0	0	6	1	11
Perry	0	0	0	0	0	0	0	1	0	0	4	4	9
Schuy	0	3	0	0	0	1	0	0	0	0	8	1	13
Snyde	0	0	0	0	0	0	0	0	0	0	0	1	1
Somer	0	0	0	0	0	0	0	0	0	0	3	1	4
Union	0	0	0	0	0	0	0	0	0	0	0	1	1
Warre	1	0	0	0	0	0	0	0	0	0	0	0	1
Westn	0	0	0	0	0	1	0	0	0	0	5	0	6
York	0	2	0	0	0	0	0	0	0	0	5	2	9
Total	11	21	15	1	3	18	11	7	1	1	385	69	543

tine. Quarantine is confinement of the animal for 10 days, if it has bitten someone. It is also a good practice to give hunting dogs an annual vaccination, even if the vaccine is the 3-year variety, to keep them at a high degree of protection. It is also suggested that any unvaccinated animal bitten by a *known* rabid animal be destroyed. There are vaccines for cattle and horses, though. While it is not required to have them vaccinated, it would be prudent to do so in an area with a high incidence of rabies.

### Rabies from Harvested Game Animals

Many sportsmen, of course, wonder about the chances of contracting rabies from the animals they harvest. It is possible for any warm-blooded animal to be carrying the rabies virus. However, dif-

ferent species have different degrees of resistance to rabies, and their lifestyles also determine their likelihood of contacting the virus. One can easily see how skunks, raccoons and foxes can transmit the disease to each other. They may fight over food or territory or den sights. That is how so many groundhogs get infected, because of raccoons, skunks and foxes trying to move into their dens. It would be very rare for a squirrel or *wild* rabbit to have rabies, because they could easily escape a sickly predator. The few positive rabbits we have had in past years have all been domestic caged rabbits, probably attacked by raccoons.

We did encounter a rabid deer last year, in Berks County. This is a very rare occurrence. The respectable 10-pointer was obviously sick to everyone who

viewed it, and it was tested mostly for safety reasons on order of the local wildlife conservation officer. Ordinarily, deer are not tested, unless they actually have attacked and bitten someone, or are showing obvious symptoms as viewed by an experienced observer.

It would be very rare but possible to become infected with rabies without getting bitten or scratched. The virus is not found in blood, but in nerve tissue and saliva. It may enter through a break in the skin. It is definitely a must to wear protective gloves while skinning furbearers in problem areas. If you are concerned, it would not be a bad idea to wear gloves while field dressing game animals. Be assured: Cooking will destroy any rabies virus, in addition to bacteria and parasites, that may be contained in the nerve tissue of the meat. (Some individuals came down with trichinosis last year from eating improperly cooked bear meat).

Looking at the map and chart, it seems cattle are at a much greater risk than deer. There are just as many bac-

teria and parasites in domestic meat as game meat. In addition, pound for pound, game animals contain more protein and less fat and cholesterol than domestic. So don't be afraid to enjoy any game meat you have harvested, it's as safe or safer than domesticated varieties.

### Raccoon Vaccination

Wistar Institute in Philadelphia is continuing its work on vaccinating wild raccoons, by placing the vaccine in baits. The procedure was carried out last year on an isolated island off the Atlantic coast. All that is needed now is federal approval to use it throughout Pennsylvania. Until the spread of rabies is brought under control, our best defense is vaccination of our pets and avoidance of suspect animals, especially the handling of wildlife young in the spring. If you are bitten or scratched, the only way to know for sure if that animal has rabies is to test it, which means killing it. Something that would not have to be done if they were left alone.

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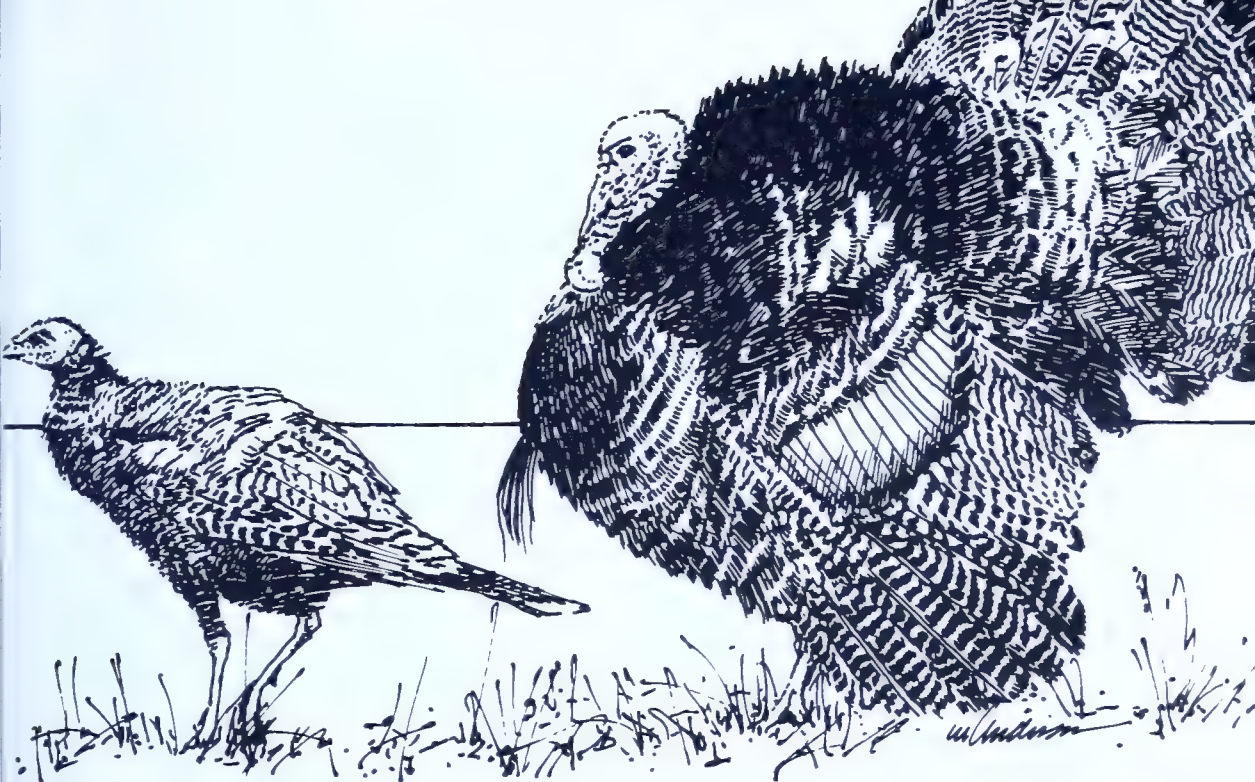
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A FEW MOMENTS later we could see both birds picking their way up along the stream, the hen in the lead with the gobbler dutifully following.

## *A Bon Voyage Gobbler*

**By Dan Watson**

**T**HE PHONE CALL came a week before the 1988 spring gobbler season opened. My job transfer was official now, and by mid-May I'd be moving to a new assignment in Wisconsin. I'm a ranger with the National Park Service, and at the time I was stationed at the Delaware Water Gap National Recreation Area in Pike County. The news of the transfer brought several immediate concerns to mind. Being a hopelessly addicted turkey hunter, those concerns focused mainly around long beards, leg spurs, and mountain top sunrises. With only a few short weeks left before it was time to move, my list of things to do was rather lengthy. At the top of the page, though, was my number one priority—one more try at a Pennsylvania gobbler.

The previous spring season had been a disappointment—I never got a chance to hunt at all. Instead, I was attending a 10 week out-of-state training session for my job. Being away from home that long

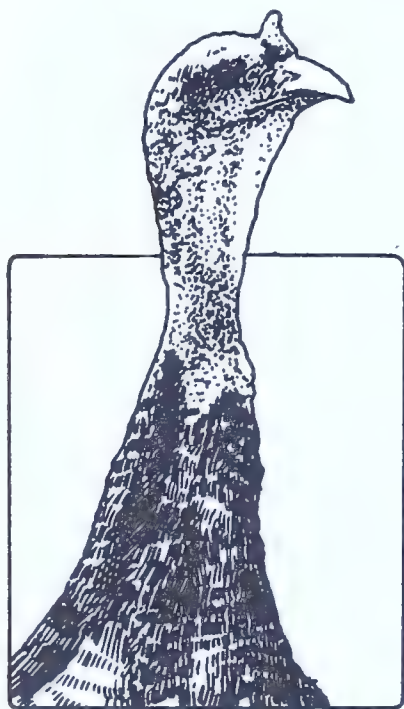
made mail from family and friends a blessing, but the accompanying photos of the boss gobblers everyone had bagged didn't soothe my frustrations over missing the entire season. Therefore, 1988 would possibly be my last opportunity for a Penn's Woods hunt, so I was determined to make the most of it.

### **Good Start**

Things were getting off to a good start. My father and I both had vacations scheduled for the first week of the season, so he planned to make the drive over from Beaver County to join me. I had been seeing numerous turkeys during my patrols throughout the park, and had zeroed in on a few potential hot spots. As opening day drew near, our chances of filling our tags were left only to favorable weather and the unavoidable impact of other hopeful hunters.

The season opener found us standing along an old road in an area where I'd

heard a gobbler making his way to his roost the previous evening. As the song-birds announced the rapid approach of daylight, the tom sounded off from the opposite hillside. We quickly moved across a small stream and got into our calling positions. Dad sent a few soft yelps and clucks down towards the bird, and was instantly answered with both a gobble and the raspy call of a hen. A few moments later we could see both birds slowly picking their way up along the stream, the hen in the lead with the gobbler dutifully following. It looked as though the hen was seeking some female company and would come to Dad's calls. I hoped that was the case, because I knew the old tom would stay right on the heels of his lady friend, giving Dad a quick end to his season. It seemed too easy to be true, and as it turned out, it was. Still some 80 yards away, the hen crossed the stream and moved away from our positions, taking the gobbler with her. Additional calling by both of us, coupled with several changes of calling locations, didn't help. As the escape wore on we were increasingly being surrounded by yelps, clucks, cackles, and even gobbles—all of which were easily attributed to various other



hunters in the area. By 9:45 we decided to call it a morning.

The remainder of the week brought more of the same. Heavy hunting pressure kept the turkeys quiet. A faint gobble or two from a distant roost, and then total silence for the rest of the morning, was the daily routine. One day about mid-week we got a look at a nice tom. It came to us off a nearby roost after I gave a flydown cackle while beating my arms against my legs to simulate a hen coming out of a tree. The gobbler apparently liked what he heard, but insisted that this hen would have to make the final move to him. After briefly appearing about 60 yards from us, he melted back into the timber as quietly as he had come in. There was no doubt about it, these birds were tough.

Vacation time slipped away faster than a work week ever could, and Dad headed home. I was scheduled to work the 4:00 pm to midnight shift for the next week, which meant I'd be able to continue to hunt. I'd be operating on even less sleep than a turkey hunter is accustomed to, though, which is not enough anyway. Nevertheless, the urge to locate a willing gobbler burned strong.

The second Monday of the season found me back in the same area we'd hunted during the first week. As the horizon slowly brightened I watched the mating flights of several woodcock, through bleary eyes that felt as though they'd clamp shut of their own free will at any moment. The disturbing lack of gobbles didn't help to alleviate my fatigue, and eventually I decided to move on to some different locations. Two more stops that failed to reveal any turkey talk convinced me that a nap was my only logical option. Minutes later I was standing in my own driveway, trying to fish the house key out of the pocket of my camo pants, when I heard a gobbler

**ABOUT 150 yards from the road I knew I was close to the turkey. He gobbled incessantly from the hillside directly in front of me, so I picked out a big pine tree to sit against and got ready to go to work.**



At about 50 yards he looked like the classic example of what a spring gobbler should be; blue and white iridescent head drawn up tight against his swollen breast, tail fanned out to its fullest extent.

sound off from just across the road. I cocked my head and held my breath, hoping I would hear the bird again and know that I wasn't merely delirious from no sleep.

"Gobble-obble-obble!" This was exactly the break I'd been waiting for. The woods across the road from my house were within the boundary of the park, so I wasted no time crossing over and slipping through a stand of pines, stuffing shells into the gun as I went. About 150 yards from the road I knew I was very close to the turkey. He gobbled incessantly from the hillside directly in front of me, so I picked out a big pine tree to sit against and got ready to go to work. The bird was stringing his gobbles together so rapidly that I found it difficult to work in any yelps during his short pauses. Eventually, I made myself known to him, and he responded lustily. Moments later I saw him as he flapped down out of a tree and hit the ground, immediately going into a full strut.

I was a bit surprised that he had still been on the roost, since it had been light out for almost an hour. But the important thing now was that I capitalize on this golden opportunity. I clucked a few times, and this brought the gobbler quick-stepping down the hill towards me. As soon as he reached the base of the hill he resumed his strutting and gobbling for all he was worth. At about 50 yards he looked like the classic example of what a spring gobbler should be; blue and white iridescent head drawn up tight against his swollen breast, tail fanned out to its fullest extent, beard stiffly bouncing up and down with his shuffling display—all against a background of soft yellow-brown pine needles.

A few more clucks and the gobbler angled towards me, first to the right,



then to the left, but always cutting the distance that separated us. At about 35 yards he extended his head and neck for a better look of the area, and as he did my finger tightened on the trigger of the 12 gauge. Seconds later I grasped him by a leg while his frantic wingbeats came to a stop.

After tagging my prize I was back at the house in no time. Soon I was seated on a log off the end of my driveway, a fresh cup of coffee steaming next to me, and the young gobbler at my feet. He was a jake, but still sported a 5-inch beard. As I alternately plucked handfuls of feathers and took sips of coffee, the morning continued to unfold and a new day awakened. It was a peaceful time. A time to remember the other birds that had lain at my feet, some bigger, some smaller, all special. As I snatched away the last few tufts of feathers I started to feel better about my impending move. I would deeply miss my hunts in the springtime woods of Pennsylvania, but leaving would be easier, now that I had my "bon voyage" gobbler.



**UNFORTUNATELY, bears enjoy much the same foods people do. Our table scraps and garbage, along with bird seed and pet food, are just what it takes to make a hungry bear happy.**

## Bottomless Pits of the Poconos

**By Robert D. Buss**

**WCO, Pike County**

**T**HIS ARTICLE is not about geology. It's about a phenomenon that's been occurring spring through fall, for many years in the Poconos, and that's becoming more apparent in other areas of northern Pennsylvania. It concerns the conflict between tourists, along with seasonal and weekend residents, and our most impressive year round residents—black bears.

The Poconos probably has more bears per square mile than any other place in the East. And a bear's main goal in life is to keep its stomach full at all times. At least it seems that way, hence the "bottomless pit."

Bears are omnivorous, which means they'll eat almost anything, and they spend the warmer months eating constantly, fattening up for their winter's sleep. Bears are also opportunistic feeders, which means they'll utilize whatever foods are readily available. Their natural foods include skunk cabbage, roots, grasses, grubs, ants and carrion, blueberries and other fruits, and in the fall, apples, acorns and beechnuts.

When such natural foods are in good supply, bears stay in the swamps and are rarely seen. But when natural foods are difficult to come by, as was the case last summer, when the blueberry crop



largely failed, the big black critters look elsewhere to fill their cavernous stomachs. Unfortunately, bears enjoy much the same foods people do. Our table scraps and garbage, along with bird seed and pet food, are just what it takes to make a hungry bear happy. And then there's the most effective bear attractant of all, the charcoal grill.

For a couple of related reasons, conflicts between people and bears has gotten to be a serious problem in the northeast. First, many people are building second homes or vacationing in the Poconos. These developments and resorts, which sometimes encompass thousands of acres, make ideal bear sanctuaries. Second, and even more of a problem, is that most of these new residents are from urban environments, particularly New York and New Jersey, who have no knowledge of the outdoors. Many of these new residents and visitors consider feeding bears a popular pastime. I'm still amazed at the extent people feed bears. Many make weekly trips to bakeries miles away to get stale pastries, and the money some spend on suet, corn, apples and other goodies is mind boggling. I've even seen instances where before a house is even fully constructed, the feeding trough is up and stocked with corn, bread, old pastries, and other food stuffs.

So far, feeding bears is not illegal, but we strongly discourage it. In short, it concentrates the animals and it encourages bears to come to people for food, which leads to major problems.

In just April through July last year I must have received more than 300 phone calls about nuisance bears. Nearly all of the calls came from people new to the area.

Most callers want me to trap the nuisance critters and haul them away, but trap and transfer is no solution. Bears can find their way home very quickly; there aren't many places where problem bears can be taken; and it's not right to dump our mischievous bears where they'll just raise havoc for somebody else.

Instead, I've developed a solution that



actually gets the public involved. I begin by explaining to each caller why the problems are occurring and what solutions are available to us. I describe how it's the large number of outdoor recreationists in the Poconos, and the related development, that is largely responsible for our many free loading bears. I go on to explain that the bears are simply hungry and looking for food, and that to avoid close encounters all a person must do is keep his property clean.

All potential food stuffs need to be placed where bears can't find them. Garbage must be kept inside or treated with ammonia (Simply saturate a household sponge and place in the container with the garbage). No animals, including birds, should be fed; and pet food must be kept inside. Barbecue grills must also be kept inside or cleaned after every use.

### Disaster Area

I strongly encourage people not to leave home or camp with just a screen door closed. All those rich cooking smells act like a beacon to a bear's radar-like nose. Believe me, a bear can turn a kitchen into a disaster area in no time.

The 15 to 20 minutes it takes me to handle each of these problems over the phone is time well spent. My public relations approach has been very successful. Most property owners have been able to eliminate their own problems with not just bears, but deer, raccoons, skunks and other critters, too. But the problem is still escalating here, and I'm afraid it's only a matter of time until somebody gets hurt—or worse.

If you find a bear on your property, or anywhere else, observe it quietly, and enjoy one of nature's most fascinating animals. But please, don't feed it.



**MANDATORY** hunter-trapper education, along with fluorescent orange requirements, has made hunting in Pennsylvania a very safe activity. With almost 1.2 million participants, only 131 accidents occurred last year.

# 1988 Hunting Accident Report

**By Jim Filkosky, Chief**  
**Hunter-Trapper Education Division**

**T**HE 1988 hunting seasons were again very safe. Considering there were almost 1.2 million participants, only 131 accidents occurred. Although slightly above the 128 reported the previous year, the number of hunting fatalities, nine, was three less than in 1987. Let's take a look at some elements involved in the hunting accidents for the past year on a species by species basis.

The white-tailed deer generates a lot of interest. About one million people are afield during the archery, regular firearms and/or flintlock deer seasons. Last year, 45 became hunting accident victims, five of which were fatalities. Of 45 accidents, 36 were inflicted with a rifle. Three were injured with shotguns, three with muzzle-loaders; two were wounded with bow and arrow, and one was shot with a revolver. Fifteen injuries were self-inflicted. Most of the accidents (38) took place during daylight hours and clear (30) weather. These

facts more or less dispell the notion that the half-hour before sunrise opening hour contributes to accidents. The two leading causes of deer accidents were accidental discharge of firearm (10) followed closely by victim in line of fire (9). Most occurred in woodland (31). In 18 cases the shooter had over 10 years of hunting experience. Deer hunting accidents represented 34 percent of the total. There were no bear hunting accidents reported in 1988.

During the spring and fall wild turkey hunting seasons about 500,000 hunters pitted their skills against this sharp-eyed, wiley bird. Unfortunately, 28 became victims of fellow hunters, two sustaining fatal injuries by rifle. Another fatal resulted from a self-inflicted injury caused by accidental firearm discharge. A majority of the offenders (21) were over 21 years of age and had over 10 years hunting experience (20). Nineteen hunters were shot in mistake for a turkey. Seven were in the line



# Pennsylvania Game Commission

## Hunting Accident Report

### 1988

#### Casualty

Fatal	
Self-Inflicted .....	2
Inflicted by others .....	7
Nonfatal	
Self-Inflicted .....	31
Inflicted by others .....	91
Total .....	131

#### Weather Conditions

	F	NF	T
Clear .....	7	86	93
Overcast .....	0	16	16
Rain .....	2	15	17
Snow .....	0	5	5

#### Sporting Arm Used

	F	NF	T
Shotgun .....	2	76	78
Rifle .....	7	38	45
Revolver .....	0	2	2
Muzzleloader .....	0	4	4
Compound Bow .....	0	2	2

#### Light Conditions

	F	NF	T
Dawn .....	0	3	3
Daylight .....	7	109	116
Dusk .....	1	8	9
Dark .....	1	2	3

#### Animal Hunted

	F	NF	T
Deer			
Regular Season .....	5	34	39
Muzzleloader .....	0	4	4
Archery .....	0	2	2
Turkey			
Spring .....	0	8	8
Fall .....	3	18	21
Pheasant .....	0	7	7
Squirrel .....	1	9	10
Rabbit .....	0	22	22
Grouse .....	0	6	6
Woodchuck .....	0	3	3
Dove .....	0	5	5
Raccoon .....	0	1	1
Woodcock .....	0	2	2
Waterfowl .....	0	1	1

#### Cause of Accident

	F	NF	T
Sporting arm dangerous			
position .....	0	5	5
Accidental discharge .....	1	17	18
Ricochet .....	0	10	10
Stray shot .....	0	9	9
Victim in line of fire .....	2	37	39
Hunter slipped and/or fell .....	1	12	13
Hunter dropped sporting			
arm .....	0	6	6
Shot in mistake for game .....	4	24	28
Sporting arm defective .....	0	2	2
Unknown .....	1	0	1

#### Place of Accident

	F	NF	T
Field .....	1	36	37
Woodland .....	8	75	83
Marsh or Bog .....	0	3	3
Road or Highway .....	0	4	4
Vehicle .....	0	4	4

#### Ages of Persons Inflicting Injury

	F	NF	T
12 to 15 years of age .....	1	13	14
16 to 20 years of age .....	1	29	30
21 to 50 years of age .....	4	57	61
Over 50 years of age .....	1	13	14
Not Reported .....	2	10	12

#### Summary of 1988 Hunting Accidents

FATAL .....	9
NONFATAL .....	122
TOTAL .....	131

NOTE: The average hunting experience per offender is 14 years. Based on 1,194,266 hunting and furtaker licenses sold in 1988, the accident rate per 100,000 licenses is: fatal—0.75, non-fatal—10.21, total—10.96.



of another shooter's fire and two were injured in accidental firearm discharge. Of those shot in mistake for game, 17 were wearing camouflage clothing, two others were wearing non-safety color clothing. Turkey hunting accidents accounted for 22 percent of the total accidents.

Rabbit hunting is still a popular sport and draws a half million participants. There were 22 rabbit hunting accidents, six of which were self-inflicted. Twenty-one of those involved a shotgun and one involved a muzzleloader. All were non-fatal. Nine victims were in the line of the shooter's fire, four received wounds from ricocheting pellets, four from falling with a firearm. Eleven accidents took place in fields, while nine occurred in wooded areas. Again, the majority of the shooters were experienced hunters, with over half having 10 or more years afield.

Squirrel hunting was on a par with rabbit hunting as far as participation, but with less than half as many accidents. Although one of the ten squirrel hunting related accidents was a self-inflicted fatality, the remainder were nonfatal. Three were self-inflicted and six were inflicted by others. Seven accidents, including the fatality, involved shotguns; rifles figured in three. Only one accident was caused by ricochet, but two each resulted from accidental discharge, victim in line of fire, hunter falling, and hunter shot in mistake for game. Experience of offenders varied from under two years to over 10 years. Eight accidents took place in wooded areas, one in a field, and one in a marsh. The two mistaken for game victims were wearing camouflage clothing.

Seven of the approximately 400,000 pheasant hunters afield last fall were involved in accidental shootings. Three were victims of their own shotguns, by either falling or dropping their firearms. Four were struck by pellets of another who

was shooting at a pheasant. Unlike most of the prior reports, a majority of offenders were less experienced, young hunters. Five accidents were caused by those in the 12 to 15 years of age range.

The six reported grouse hunting injuries, five line of fire and one self-inflicted through careless handling, were caused by shotgun pellets and were all nonfatal. The self-inflicted victim was 14 years old, with two years experience. The five other shooters were 21 to 50 years of age, with one having hunted for seven years, and four with over ten seasons behind them. It is estimated that about 375,000 hunters took part in this sport.

The September dove season saw about 135,000 shotgunners out for these fast flying game birds. Of that group, five accidentally injured fellow hunters. One each was caused by the firearm accidentally discharging in the hands of the shooter and shooting by an unknown hunter. Three shooters caused injury while shooting at doves and striking fellow hunters in their line of fire. Four accidents took place in fields and one in woodland. Except for the unknown shooter's age, all were in the 21 to 50 age bracket and had over five years hunting experience.

Three accidents occurred to woodchuck hunters. Two were self-inflicted. One of the self-inflicted accidents resulted from a fall with a rifle, while the other involved the accidental discharge of a revolver. The third occurred at dusk, when a nonhunter was mistaken for a woodchuck. All three accidents took place in fields. The wearing of fluorescent orange has helped to reduce woodchuck accidents.

Two woodcock hunters were injured by being in the line of fire of their hunting companions. Both occurred in wooded areas and were caused by hunters with over ten years experience.

Only one furtaker and one waterfowl hunting accident were recorded. A raccoon hunter dropped his shotgun, inflicting injury upon himself. The latter involved a goose hunter who slipped and fell, causing his shotgun to discharge and injure a fellow hunter.

Since the implementation of mandatory training for first-time license buyers and the increased use of fluorescent orange for most types of hunting, the sport has become much safer. Participants, too, are more aware of their responsibilities toward fellow hunters, the nonhunting public, and the wildlife they hunt.





**THE GAME COMMISSION'S field force increased by 24 last February, following the graduation of the 20th class of wildlife conservation officers trained at the Ross Leffler School of Conservation.**

## 24 New Officers Receive Assignments

**By Bob Mitchell**

**Assistant Editor**

**T**HE GAME COMMISSION'S 20th class of wildlife conservation officers have joined the agency's field force, following graduation from the Ross Leffler School of Conservation in Harrisburg. The 24 new officers represent the first class to graduate from the training school since it was moved from Brockway, Jefferson County, to the Game Commission's new headquarters complex.

Graduation ceremonies were held February 25 at Harrisburg's Susquehanna Township High School auditorium. Lonnie L. Williamson, vice president of the Wildlife Management Institute, delivered the keynote address. Swoyersville District Justice Andrew Barila, Jr., president of the Special Court Justice Association of Pennsylvania, administered oaths of office to the new conservation officers.

Most of the new graduates have assumed duties as wildlife conservation officers in assigned districts throughout the state. Seven of the graduates have been temporarily assigned to the agency's Bureau of Law Enforcement.

Members of the class were selected from approximately 1200 applicants following a rigid series of written, oral and physical examinations. Included in the class of enrollees were 11 who had served as deputy wildlife conservation officers, and two who were deputy waterways conservation officers; 20 are married and 18 are veterans. The average age of the class is 32.

Included in the 38-week course of instruction were wildlife management, wildlife laws and regulations, law enforcement principles and methods, land management procedures,

public relations, public speaking and conservation education, firearms training and

In addition to academic classroom training, the new officers worked with field personnel

Wildlife conservation officers are responsible for administering a wide variety of game laws in an area of about 350 square miles. Primary duties include law enforcement and conservation, and training an efficient staff of volunteer deputy wildlife conservation officers.

Members of the 20th class, along with the home towns, and the counties to which they belong, are: Jerry A. Bish, Ford City, Jefferson; Donald R. Burchell, Sr., New Milford, Lancaster; Jerry A. Bish, Ford City, Jefferson; Donald R. Burchell, Sr., New Milford, Lancaster; Jerry A. Bish, Ford City, Jefferson; Donald R. Burchell, Sr., New Milford, Lancaster;

Conway, Gouldsboro, Harrisburg, Donald R. Daugherty, Butler; Keith A. Falasco, Sharpsville, Beaver; John B. Schuylkill; Richard E. Karper, Dover, Carbon; Richard Muncy Valley, Susquehanna; John A. Morack, Mount Harrisburg; Michael G. Ondik, State College, Crawford; Bellefonte, Chester; Larry M. Smith, Aliquippa, Erie.



**PROFICIENCY** with firearms is, of course, an important part of the training program. Officers spent a great deal of time on the range, learning and sharpening their skills.



**THIS WAS** the first class to graduate from the Leffler School of Conservation, above. Unarmed defense, right, was practiced regularly, to fully prepare new officers for whatever situations they may encounter once afield.



**LAW ENFORCEMENT** methods, such as proper search procedures, left, were covered extensively during the 38-week training period. Handling animal nuisance problems, right, is something every wildlife conservation officer must be familiar with.





med self-defense, and agency administrative policies.  
 during the past hunting and trapping seasons.  
 Commission programs within an assigned geographical  
 education. Officers are also responsible for directing

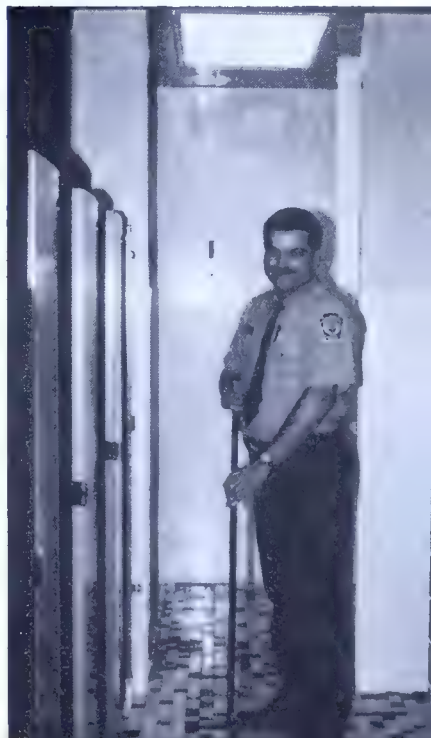
been assigned, follow: David E. Beinhaul, Liverpool,  
 Douglas C. Carney, Evans City, Cambria; Timothy  
 , Erie, Harrisburg; David W. Donachy, St. Marys,  
 ; Oil City, Harrisburg; Stephen S. Hower, Newport,  
 Ernerd, II, New Milford, Harrisburg; Scott J. Lorow,  
 anel, Montgomery; Robert W. Norbeck, Pine Glen,  
 eth G. Packard, Tioga, Jefferson; William C. Ragosta,  
 hy F. Smith, Hanover, Harrisburg; Keith A. Snyder,  
 Selinsgrove, Lackawanna; Linda L.  
 Spotts, Bushkill, Harrisburg; Edward B.  
 Steffan, Harrisburg, Allegheny; and  
 Joseph V. Stefko, Jr., Greensburg, West-  
 moreland.



**LONNIE L. WILLIAMSON**, above, Wildlife Management Institute vice president, discussed the history of wildlife conservation in America. Wild plant identification, below, was something every student had to study.



**OFFICER Keith A. Snyder**, below, was selected by his classmates to be their spokesman. In his eloquent address he talked of the challenges the class faces in carrying Pennsylvania wildlife conservation into the next century. WCO Larry M. Smith distinguished himself not only as a RLSC graduate—and with a mop—but also as a photographer; he provided most of the photographs shown here.





# FIELD NOTES



## Still Friends?

**PERRY COUNTY**—Last winter I asked Waterways Conservation Officer Ben Leamer to help me with an investigation. Ben and I have been friends for a long time, so I didn't feel too bad asking him to take his boat and motor out of mothballs so we could patrol the Susquehanna River. To make a long story short, we didn't have a great day. It was cold and windy, and we encountered rain, sleet, snow, thunder and lightning. Then, after his motor stopped for the third time, Ben had to get in the shoulder-deep water to clean it before we could get back to shore. As it turned out, we didn't find what we were looking for, either. The last I heard from Ben, he was mumbling something about me and harebrained ideas. —WCO Leroy Everett, Newport.

## Batting 1000

**POTTER COUNTY**—Look out Jeane Dixon, our predictions that hunters would find a lot of big bucks if they would just get away from the roads held true as a record 255 bucks were entered in the county's big buck contest last year. —WCO Ron Clouser, Galeton.

## Noteworthy Sighting

**HUNTINGDON COUNTY**—One morning last January I saw soaring above my home a golden eagle. It was the first one I'd ever seen, and I hope I don't have to wait so long to see another. —WCO Don Adams, Waterfall.

## Dedicated Servants

**YORK COUNTY**—In the three years I've been here, it seems my deputy force keeps doing more and more. Having worked as a game warden in California, which has no deputy force, I learned real fast how valuable these volunteers are. Deputies are a tremendous boost to not just our law enforcement programs, but our other efforts as well. I really feel, for the first time in my 11 years as an officer, that some of the hard core poachers are starting to look over their shoulders before committing any crimes, and I credit this entirely to my deputies. This commitment must be rubbing off on the general public as well, because with each passing year we're getting more calls and complaints about game law violations, which just makes our job easier and more fulfilling. Get to know your conservation officer and his deputies, and keep them abreast of what's going on in the district, so they can better protect those resources for all of us. —WCO G.C. Houghton, Emigsville.



## Ouch!

A small game hunter I encountered last November 26 was taking full advantage of the unusual warm spell. Along with his boots, gun, hunting coat and fluorescent orange hat, he was kicking through the brush, wearing a pair of Bermuda shorts. —LMO Barry S. Zafuto, Ebensburg.



## Contagious

**GREENE COUNTY**—Neighboring officer Bob Shaffer's suspicions were aroused when he noticed a man sitting in his truck parked on a game lands. Bob pulled up behind him and then went to investigate. It turned out the gentleman had run over a sign stake and got two flat tires, and he was studying his owner's manual to find his jack. Not one to miss out on all the action, Bob ended up going for his owner's manual, too; he had run over the same stake. —WCO R.S. Ansell, Rogersville.

## It's Only Beginning

**TRAINING SCHOOL**—With our nine-month training program about to end, one thing is undeniably clear: It's just as hard at the end as it was at the beginning to come up with an interesting Field Note. —Trainee Richard Larnerd.

## Opinion vs Facts

**BLAIR COUNTY**—Deputies Ray Dickson and John Miller were patrolling during the antlerless deer season when they received a report about a truck full of deer. Upon investigation they found the truck, containing ten properly tagged deer, and the five hunters who took them. While the deputies were examining the deer, one of the hunters questioned our bonus deer program. He said it was his opinion that there were hardly any deer left. Could the phrase "Can't see the forest for the trees" be changed to "Can't see the deer for the herds?" —WCO Steve Kleiner, Altoona.

## Taboo

**SCHUYLKILL COUNTY**—An individual killed an albino doe here last year, but not in the antlerless deer season. Fortunately, he was apprehended, received a stiff fine, and lost his hunting privileges for several years. I guess he never heard the old Indian story about the white buffalo. —WCO John Shutkufski, Pottsville.



## Last Laugh, Too

**ARMSTRONG COUNTY**—Last year up to 20 hunters tried to locate at least four bears that had raided a man's beehives nearly every night of the week before the season. They combed the woods around the beekeeper's property, but nobody saw any sign of a bear. But before 10:30 on the evening the bear season closed, a bear arrived and destroyed the last remaining hive. —WCO Al Scott, Rural Valley.

## Popular Hangouts

**ADAMS COUNTY**—Last year neighboring officer Larry Haynes and I had to deal with two beavers, an opossum, a deer, kestrel, raccoon, and a hen turkey that showed up at the doors or inside some of our local schools. I think these animals misunderstood the meaning of the agency's wildlife education programs. —WCO Mike Dubaich, Aspers.

## Okay, Dad

**ERIE COUNTY**—I was covering the game law portion of a hunter-trapper education class last year when a 12-year-old boy, with a puzzled look on his face, asked, "If I shoot a deer and get it back to the house before a game warden sees me, may I go back out for another one?" It was obvious who the boy's father was, his beet red face fell into his hands, and his eyes probably had tears. —WCO Shayne Hoachlander, Albion.



### No Need to Leave

**CRAWFORD COUNTY**—Six adult and six juvenile bald eagles spent the entire winter at Pymatuning, ready to start the breeding season right on time.—WCO Dave Myers, Linesville.

### Kept At It

**PHILADELPHIA COUNTY**—Deputy Stephen Landis started deer hunting when he was 12 years old but, despite several opportunities, he never made the right connection. It wasn't until last year, 13 seasons later, that he finally dropped his first whitetail, a Montgomery County button buck, which he is most proud of. It just goes to show, good things come to those who wait.—WCO Richard J. Shire, Philadelphia.

### Well-Read

**CLEARFIELD COUNTY**—When Trainee Linda Spotts and I walked into District Justice Jim Hawkins's office, we were quite pleased to see a current copy of **GAME NEWS** on his desk. We couldn't resist taking a peek at what he had been reading and, of course, it was the Field Notes. (Linda was quick to point out that she had a Note in that issue while I did not.) Jim told us he reads the **GAME NEWS** cover to cover, every month, and thoroughly enjoys the magazine. It sure is nice to know our justices stay informed on wildlife issues and Game Commission programs.—WCO Colleen M. Shannon, Luthersburg.

### Slight Disagreement

Last November Heather Pressler was visiting her mother Barbara, who lives next to SGL 106. While she was watching birds at her mother's feeder, Heather saw a chickadee fly into a sliding glass door. When Heather picked up the stunned bird she noticed a sharp-shinned hawk perched nearby. Then, suddenly, the little hawk flew over and actually brushed Heather's face in an attempt to get the chickadee. The sharpie was probably miffed at Heather for taking his meal.—LMO Steve Opet, Tamaqua.

### We Hope So

**INDIANA COUNTY**—Last November I saw a pair of canvasbacks on a small lake near Yellow Creek, along with a dozen ring-necked ducks, several buffleheads, and some mallards and black ducks. Canvasbacks are rare in this part of the state, and those were the first I'd ever seen. Waterfowl have been showing up here in increasing numbers over the past few years, though, and I can't help but think the shorter seasons and reduced bag limits are largely the reasons why. Although maybe temporary inconveniences, the regulations may help ensure that future generations are able to experience the same thrills many of us take for granted today.—WCO A.S. Hamley, Marion Center.

### Moving On

**MONTGOMERY COUNTY**—After serving this area for 13 years, I'm transferring to the Endless Mountains area of Wyoming County, an area that's been calling me for some time. I'd like to take this opportunity to thank all the good people who have helped me here. My most sincere gratitude goes to my deputy force. Norm, Bud, Tom, Bob, Ron, Pete, Mike and Perry, thanks, you've been great. May the sun always warm you and the wind be at your back.—WCO William Wasserman, Montgomeryville.



## Easy Winter

**FOREST COUNTY**—Last winter's uncommonly warm weather sure made things easy for wildlife. While patrolling during January I saw more grouse than I ever have at that time of the year. If the weather cooperates during the nesting season, we're sure to have another bumper crop of the explosive game birds. —WCO Al Pedder, Marienville.

## Sure Is

**CLARION COUNTY**—Greed is the major factor in all Game and Wildlife Code violations. Taking game out of season and taking over the limit are obvious examples, but hunting in Safety Zones, from the road, or after hours are other forms of greed, too. Is it not greedy to put your own wants, desires, pleasure and self above the safety and well-being of others? —WCO Gordon Couillard, Clarion.



## Caught Empty-Handed

**TIOGA COUNTY**—Ed Bowser, Knoxville, was archery hunting when he decided to quit a little early. Although there were 20 minutes of hunting time left, Ed lowered his bow and arrows to the ground and then dropped his line. But just as he started to climb down, two bucks came walking down and stopped right under him. And right behind was a bigger buck that joined the other two. Like they say, "A bow in the hand is better than. . . ." —WCO F.A. Bernstein, Middlebury.



## And Then Bought Some Slip-Ons

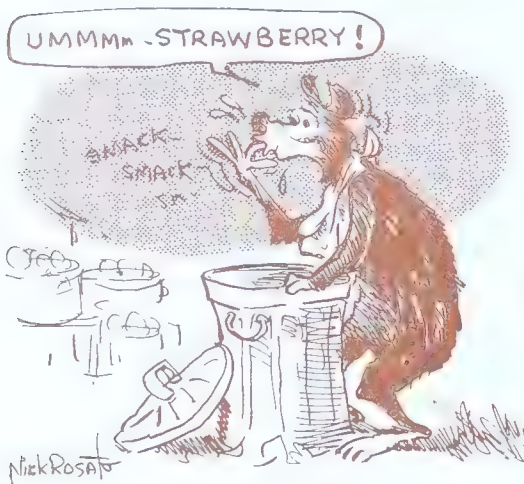
**CENTRE COUNTY**—Ken Ishler, Millheim, was grouse hunting when he bent over to tie his shoe. As most grouse hunters will understand, a grouse flushed just as Ken began tying his laces. The bird, of course, was long gone by the time Ken got his shotgun. He bent over a second time to tie his shoes and another grouse flushed. Same result. Ken knew it couldn't happen a third time, so he bent over again, only to have a third bird flush. Well, it happened a fourth time, too, and although he didn't tell me so, I've got a sneaking suspicion that Ken spent the rest of the day hunting with an untied shoelace. —WCO George Mock, Coburn.

## First One, Then the Other

**McKEAN COUNTY**—When one member from a group of hunters went into a hollow he saw a flock of turkeys and then a nice 6-point, which he killed. While field-dressing his trophy he saw three other bucks. When he told this to another member of the party, the other member went into the hollow, saw several turkeys and then a spike buck, which he didn't shoot. The next morning another member went into the hollow, saw a big tom turkey fly over his head, and then saw several deer, one of which was a buck, which he missed. I guess, at least in that hollow, that you had to see a turkey before you'd see a buck. —James E. Rankin, Port Allegany.

## Well Deserved

**TRAINING SCHOOL**—On a trip to Blue Marsh, Berks County, our class was shown border cutting and other habitat management techniques. While there, men from the Food and Cover Corps turned us loose with chain saws, giving each of us an opportunity to build a brushpile. I was impressed with many of the techniques, but even more impressed with how hard the Food and Cover Corps members work and their strong dedication to improving our lands for wildlife. As a hunter I often enjoyed the game lands, but I never considered the effort involved in creating and maintaining one. Members of the Food and Cover Corps, our hats are off to you. —Trainee Larry M. Smith.



## Bad Publicity

**McKEAN COUNTY**—The residents of Mt. Jewett are accustomed to bears roaming streets and yards. But when one bruin began to make regular stops at Bob's fruit and hamburger stand, Bob got a little worried. Several times Bob watched the bear come into his stand, walk right past the bushels of ripe melons, tomatoes and other fruits, and head straight for the garbage cans full of hamburger grease, french fries and ice cream wastes. Bob was worried the bear might give his fruit a bad reputation. Either Bob's burgers are the best, or the bear just wasn't into health foods. —WCO John P. Dzemyan, Smethport.

## Where There's a Will . . .

**WESTMORELAND COUNTY**—Deputy Ed Farzati was patrolling near Latrobe when he met Ronnie Ulishney, an anxious youngster ready to go hunting for the first time. Along with his dad and cousin, they headed out to hunt pheasants, and by the end of the day Ronnie had bagged two. What's so special about that. Well, Ronnie is confined to a wheelchair, but the only thing limiting him that day was the bag limit. —WCO D.L. Neideigh, Greensburg.

## Foolish

**SOMERSET COUNTY**—Ever wonder why we have regulations to control spotlighting? Last year three farms that had been open to public hunting here were posted because of inconsiderate spotlighters driving on private lanes and fields, and shining lights on homes. —WCO C.E. Guindon, Jr., Boswell.

## Deadly Debris

**UNION COUNTY**—Ivan Martin, Mifflinburg, told me a member of his hunting gang took a deer that appeared to be in poor physical condition. Closer examination revealed that a flip-tab from a beverage can was imbedded under the animal's tongue. From the condition of the animal, it was obvious that the little piece of litter would have certainly caused the animal's death. It just proves, no amount of litter is insignificant. —WCO Bernie Schmader, Millmont.

## Beneficial Effects

**BEDFORD COUNTY**—With the dead timber standing as a stark reminder of the gypsy moth infestation, many sportsmen equate the loss of timber to a loss of wildlife. A close examination reveals, however, that the grapes, dogwoods, sumacs, viburnums and many other trees and shrubs springing up on these areas are actually providing more food and cover for wildlife. —WCO Dave Koppenhaver, Everett.





**TOM LUCAS**, Lock Haven, stayed in Clinton County to get this 445-pound bruin. Tom dropped it with two shots from his Winchester Model 70 30-06.

## Bear License Procedures Simplified

**T**HE GAME COMMISSION has simplified the allocation and distribution of bear licenses. At their March meeting in Harrisburg, the Commission eliminated the annual license allocations and application deadline. This year hunters will be able to purchase bear licenses anytime after regular hunting licenses go on sale in June. Bear licenses will be available over the

counter or by mail at Harrisburg headquarters. The Commission's six regional field offices will also handle over-the-counter sales. Although a hunter may have only one valid bear license, there will be no limit on the number of applications in a single envelope, or licenses purchased over the counter.

In adopting the proposal it was noted that before bear licenses were first authorized in 1982, research indicated there was a rapidly escalating army of some 200,000 bear hunters in Pennsylvania and, without a method to control the number of hunters afield, over-harvests were possible. The bear license effectively reduced the number of bear hunters by about 50 percent, and the annual allocation of 90,000 to 100,000 licenses has seldom been fully subscribed.

Commission officials feel that because the number of bear hunters has stabilized and bear populations have



increased, there is now no need for hunters to wait until October to buy bear licenses.

In another important move, the Commission at their January meeting, temporarily suspended a five-year research study that sought workable alternatives to the present county deer management system. For several years a trial program has been underway in which biological and hunter data was gathered and analyzed by townships, particularly in Lycoming, Potter and Warren counties.

The Commission suspended the study because they felt it wouldn't justify the substantial inconveniences and costs it would take to further develop and implement alternate management units throughout the state—especially since the county system, coupled to the new bonus license program, is working so well.

The Commission was quick to point out, however, that deer data will continue to be collected as it has traditionally, and that alternate management

unit studies will be quickly resurrected should the need arise sometime in the future.

In other action, the Commission revoked the hunting and trapping privileges of 162 individuals prosecuted for violations of the Game and Wildlife Code. The revocations ranged from one to 12 years.

At the beginning of the January meeting, veteran Commissioner Roy J. Wagner of York was elected to succeed C. Dana Chalfant of Gibsonia as Commission president. A member of the Commission since 1983, Wagner previously served as both vice president and secretary. Wagner also is president of the Pennsylvania Wildlife Federation and for many years served as a state officer with the Pennsylvania Federation of Sportsmen's Clubs.

Clair W. "Butch" Clemens of Hatfield succeeds Wagner as Commission vice president, and Edward L. Vogue of Dupont succeeds Clemens as Commission secretary.

## Field Officers Aid Cancer Research

**G**AME Commission officers in Lancaster and Lebanon counties have been recognized by officials of the Milton S. Hershey Medical Center for their assistance with an ongoing cancer research project. In a recent letter to the Commission, Dr. John W. Kreider, who heads the Department of Experimental Pathology at the Gittlen Memorial Laboratory, expressed his gratitude for the officers' cooperation in obtaining wild animal tissue. Kreider noted:

"We received a very generous supply of cottontail rabbit ears for our experiments as a result of Commission activities on the opening day of small game season. I want to express my appreciation for the cooperation of the field officers in obtaining rabbit ears for our studies.

"The skin from rabbit ears is used to produce a papillomavirus

in the research laboratory. This material is found in large numbers only in the Midwest United States. It is now illegal to import rabbits into Pennsylvania from that region, so we must rely totally for research purposes upon virus we can produce in the laboratory.

"The importance of this rabbit virus is that it is very similar to several other viruses which are closely associated with the development of human cervical cancer. We are studying this system in rabbits in the expectation that it might lead to the development of a vaccine which could prevent the onset of cervical cancer in women.

"Your officers should take some satisfaction from the fact that they have become a very important and critical component in the war against this type of cancer. Again, many thanks."



# COMMONWEALTH OF PENNSYLVANIA

## HUNTING LICENSE APPLICATION

(Certified Check or Money Order in US Currency Required for Mail Orders from Nonresidents)

**LICENSE FEES ARE NOT REFUNDABLE****Check Type(s) Desired In Block****Agent Write In  
Stamp Number****Agent Write In  
Stamp Number**Res. Ad. (17-64 yrs.) ☐ \$12.75Res. Ad. Furtakers ☐ \$12.75Res. Jr. (12-16 yrs.) ☐ \$ 5.75Res. Jr. Furtakers ☐ \$ 5.75Res. Sr. (65 yrs. & older) ☐ \$10.75Res. Sr. Furtakers ☐ \$10.75Nonres. (Hunt) ☐ \$80.75Nonres. Ad. Furtakers ☐ \$80.75Nonres. Jr. (Hunt) ☐ \$40.75Nonres. Jr. Furtakers ☐ \$40.75\*\* Muzzleloader ☐ \$ 5.50

\*\* (Cannot be purchased after September 30th)

Archery ☐ \$ 5.50

5-day Nonresident Small Game (Includes Waterfowl) Valid From \_\_\_\_\_ To \_\_\_\_\_ \$15.50

\* Resident Disabled War Veterans Claim No. \_\_\_\_\_ Free ☐ Claim No. \_\_\_\_\_

ALL MAIL ORDERS — Add \$.75 POSTAGE \_\_\_\_\_

Furtakers Back Tag No. \_\_\_\_\_

\* Available only from County Treasurers

TOTAL \_\_\_\_\_

Hunting Back Tag No. \_\_\_\_\_

**PRINT PLAINLY**Name \_\_\_\_\_  
(First) (Middle Initial) (Last) (Occupation)Legal Residence \_\_\_\_\_  
(Street or R.F.D.)City \_\_\_\_\_ State \_\_\_\_\_  
(Zip Code)\_\_\_\_\_  
(County of Residence) Phone No. ( ) \_\_\_\_\_  
(Area Code) (Official Use, PGC Only)Age \_\_\_\_\_ Color \_\_\_\_\_ Color \_\_\_\_\_  
Hair \_\_\_\_\_ Eyes \_\_\_\_\_ Weight \_\_\_\_\_ Height \_\_\_\_\_Date of Birth \_\_\_\_\_ Sex: ☐ Male ☐ FemalePlace of Birth \_\_\_\_\_  
(Post Office) (State) (Nation) Resident of Pennsylvania since \_\_\_\_\_

I present the following as evidence that I have completed the required hunter education course or have held a prior hunting license: or I am currently serving in the Armed Forces or have been discharged under honorable conditions within 6 mo. of application.

Hunter Education Training Certificate or Military Papers \_\_\_\_\_  
Date \_\_\_\_\_A prior hunting license from \_\_\_\_\_  
(State or Nation) Year \_\_\_\_\_ License# \_\_\_\_\_I am unable to produce a prior hunting license, but certify below that I did hold a hunting license issued by \_\_\_\_\_  
(State or Nation)

Agents Not Responsible for Licenses lost by Mailing.

Mail Application and correct amount of fee (Include \$.75 postage) to the **PENNSYLVANIA GAME COMMISSION, LICENSE DIVISION, 2001 ELMERTON AVENUE, HARRISBURG, PA. 17110-9797. (DO NOT SEND STAMPS).** All applicants must present proof of Hunter Education Training or prior hunting license. (Preferably a photostatic copy). 5-day Nonresident Small Game License not valid for turkey or big game. Mail orders for Resident Hunting Licenses must include positive proof of residency in this Commonwealth.**CERTIFICATION OF CORRECTNESS**

I certify that all of the above information and documents presented are true and correct and that my hunting privileges are not revoked for this license year.

(X) \_\_\_\_\_  
(Signature of Applicant plus parent or guardian for persons under age 17) (Date)

I hereby certify that applicant has properly identified himself/herself and in my opinion is entitled to license(s) listed.

Signature of Issuing Agent \_\_\_\_\_ / \_\_\_\_\_  
(FORM OF ID USED)



**LOGGING DESTROYS** the appearance of a forest, but the new growth that follows benefits all forms of wildlife. When looking for new hunting grounds, I deliberately search for recently cut areas.

## The Flip Sides

**W**HEN THE TORNADO ripped through northwestern Pennsylvania four years ago, I was living just off the edge of its path, an early witness to the destruction. Today, I drive daily through a mile wide reminder of the event, a swath where trees were torn up, houses and lives ruined. But in the time that has gone by, the tornado path has changed. The twister brought disaster, but it also brought something beneficial, at least for wildlife. The tornado path is growing, season by season, into some of the best hunting turf in this part of the state.

It may be going a bit far, but disasters can be a hunter's—and wildlife's—best friend. Of course, immediately following the twister, it was hard to see the killer wind as anything but a tragedy. Now, in the aftermath, looking at the occurrence solely with a wildlife enthu-

siast's eyes, the tornado-created change is one of the better things to happen to local habitat in a long long time.

Like many, beyond the immediate concern I felt for the families who suffered loss in life and property when the tornado steamrolled through, I was aware of the loss in wildlife. Surely there had been deer, squirrels, raccoons, grouse, untold numbers of songbirds and other nongame animals that had been injured or destroyed. Their homes, too, were gone. One portion of the twister path near my home was on a game lands, in a valley that looked as if the tornado had decided to stay awhile and roll around a bit. There had been big woods there, large oaks, maples, huge hemlocks overshadowing a quiet creek. In a moment it was gone, a wasteland that looked ravaged and dead.

Now it is transformed. The land is no



**THE ONLY way to hunt many of the areas hit by the tornado of 1985 is by watching logging roads or from tree stands (on private land only, and with written permission of the owner).**

longer stately and picturesque, but in its own way it's almost beautiful. The tornado path is regrowing and, as the local hunters know, it's producing more grouse, more rabbits, and more and bigger deer than the land did before. The twister has created a wide, miles long, nearly impenetrable thicket of regenerating forest. Saplings crowd together, blackberry bramble, thorny crabapple and sprawling grapevine have entangled so that even the deer need tunnels to get through. The only way to hunt it is to get up in one of the few remaining upright trees, watch a path cut by the timber salvage operations, or post along the edges and hope something comes out in the open. Already there are rumors of trophy bucks, several years old and massively antlered from having stayed hidden in the tornado path. Some were even taken last year.

The tornado disaster had the happy effect on the habitat by pushing back the natural succession of the vegetation. Instead of mature trees, which the wind twisted off and scattered, the land has been set back to an earlier stage of saplings, brush, and grasses. As every deer hunter knows, that sort of readily available browse and escape cover is a dynamite combination for larger, healthier animals. Surrounding the tornado path there are still hardwoods and hemlock, but the sameness of the forest has been injected with some spicy variety.

All of us in the northwest hope that tornados like '85's will be a rare occurrence, indeed. We still watch every thunderstorm with apprehension. We don't need such ferocity very often. But a tornado isn't the only disaster to have a good side. There are other natural and manmade habitat changes that seem to devastate the forest, but, in fact, are simply alterations that can trigger a wildlife boom.

Some disasters are confined to a small space and have very localized, but still



important, effects. Strong, less than tornado strength, winds can knock down trees whose absence allows light to reach the ground. There a small patch of brushy cover will spring up. We've all learned, when hunting through open woods, to veer toward the thick spots, because that's where we know to watch for a deer to jump up or a grouse to flush. How many times, in getting there, have we had to step over a big windfall and never realized that it was the reason for the accompanying thicket?

Ice storms and heavy, wet snow can break down trees, especially when they occur so early, or late, that the leaves are on. A few years ago, an October storm left large sections of the eastern Pennsylvania county in which I lived without power for several days. Many trees were downed, around which it later was a good place to hunt. Heavy rains that cause flooding, toppling trees, or extended flooding which kills trees, also

## Another View...

by Linda Steiner

set back forest succession, with game-producing results.

Fire, which may or may not be man-made, looks like an irrevocable tragedy if you visit the site soon after the burn. I'm always suspicious, though, of those news reports that say so many hundreds or thousands of acres have been "destroyed" by fire. I've seen too many come back, even better than before, in fresh, young growth. Deliberate use of fire by wildlife managers and foresters is finally coming into its own as a habitat manipulation tool.

In the way it makes a radical disturbance in existing woodland, logging is certainly a disaster. Clear cutting, even-age timbering, destroys the forest as it had been, but is a friend to what it can be. I've noticed so many types of wildlife using regenerating clearcuts that I now make it a point, when looking for a new hunting spot, to seek them out. Last year, I took a bonus antlerless deer in Cameron County, on a game lands I'd never hunted before. The deer was bedded with others in a hollow between

two large clearcuts that I located. That area showed more fresh deer sign in the new snow than anywhere else on the mountain.

Reclaimed, revegetated strip mines, brushy utility rights-of-way, cleared lanes for gas transmission lines are all manmade "disasters" that can help. Even wildlife itself destroys to improve. The beaver's cutting, damming and flooding kills trees, but the openings and forest pools they create more than compensate in benefits to many species.

When a favorite bit of forest is obliterated, altered by the passage of wind, flood, fire, or chainsaw, it's hard to be optimistic. Life is change, and though the land will never be the same again, it can be different in a way that is actually better for wildlife, and for you as a hunter. There are real disasters to the land of course, in pavement and buildings that bury the soil and the natural potential. But who knows? Time is an ally. Sites are abandoned and greenery continues to sprout up through the cracks.

## ***GAME*cooking Tips**

### **Another Variation of Hassenpfeffer**

As I get around the state, attending sports shows, giving seminars, and promoting my books, many of you share your favorite recipes and cooking tips with me. Talking to those who use my books and read my columns helps me to know what kind of cooking you are interested in, and what kind of recipes you are looking for. How to cook rabbit keeps coming up. Many people want new variations for the old standby German Hassenpfeffer.

Here is the latest addition to my file.

#### **Hassenpfeffer**

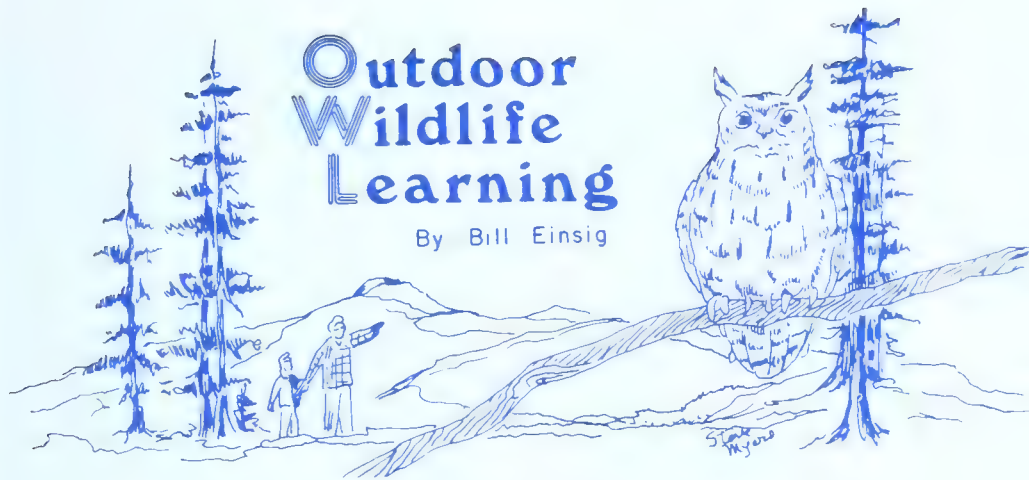
- 1 rabbit, cut into serving size pieces
- 4 cups wine vinegar
- 1 tablespoon salt
- 1 tablespoon pickling spices
- 1 tablespoon peppercorns
- 2 bay leaves
- 1 cup chopped onions
- 2 tablespoons cooking oil
- 2 tablespoons flour

- 1 cup cold water
- 1 teaspoon cinnamon
- ½ teaspoon allspice

Place rabbit in a bowl or Zip Loc bag and cover with vinegar. Add the salt, spices, peppercorns and ½ cup of the onions. Marinate in the refrigerator for 24 hours. Drain, cover with boiling water and simmer about one and a half hours or until the rabbit is tender. Remove the meat from the bones and strain broth. Heat oil in a frying pan, blend in flour, stirring constantly to make a roux. Add the cup of water and whisk until well blended and smooth. Cook until thickened. Add the rabbit, 2 cups of the strained broth, cinnamon, allspice and remaining onion, and then simmer for another hour. — Serves 2

— FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY





## Requiem for Smokey

**I**S SMOKEY THE BEAR a good guy or bad? Has he outlived his usefulness? Should he be replaced with a more enlightened spokesman for modern forest management?

Such thoughts are pure heresy for a generation grown on Smokey's message, "Only YOU can prevent forest fires!" We were taught the only good forest fire was a dead forest fire. They were destructive of timber, wildlife and of anything else that lay in their path.

But, more recently, we've learned something new about these woodland fires. They're not always bad. Naturalists recognize the value of fires in certain settings. Low surface fires that creep across the ground, incinerating downed limbs, needles and other forest debris, actually help to prevent larger, more serious fires that engulf whole trees.

We've learned, too, that fire can be used to arrest the natural succession of plant communities by keeping the area in a younger stage of development, which is often beneficial. Maybe we want to kill hardwood seedlings in order to protect stands of valuable southern conifers. Or, perhaps we allow fires to burn holes in the canopy to let sunlight reach the forest floor and promote growths of energy-rich brush for wildlife. Or, maybe we want to ensure a sufficient number of jack pines in the right age and size range that will offer nesting opportunities for the endangered Kirtland's warbler. Fire appears to have certain notable benefits as well as dangers. Maybe fire isn't really as bad as Smokey has led us to believe.

Last summer's well-publicized conflagration of Yellowstone National Park, re-emphasized a perceived ambivalence toward forest fires. Most of us, as interested, but untrained naturalists, followed media reports of the Yellowstone fires. We heard of the destructive fury of the firestorms and of the ever-spreading fire perimeters. At one point, I was sure the television newsman wanted me to believe Old Faithful itself was about to go up in flames.

But then the voices of the biologists came through, telling us fire was no stranger to the Yellowstone ecosystem. They said we were witnessing another renewal of this natural system as it had been renewed by fire in the past. The fire had not destroyed the ecosystem but had suddenly, and dramatically, changed it to something different, something less mature. In time, perhaps a century or so, the lodgepole forest would return.

Attention was also focused on the Park Service's policy on natural fires. There were those who unfairly blamed the fires on that policy and, for the first time in decades, there were many of us who heard about the positive aspects of fire. Smokey the Bear seemed to be at odds with what the Park Service considered to be good management.

Casual readers might assume the natural fire policy to be a new trend in forest fire management. Some could even wonder if it might come to Pennsylvania. The first is not true; the second is not likely.

In 1972, managers of Yellowstone adopted a program with very cautious



guidelines that allowed certain fires to burn naturally. Yellowstone was formed as a dedicated wilderness area with a mandate to managers to preserve its primitive ecology. Managers believe certain natural fires should be allowed to burn, with careful monitoring, because fire has been a crucial factor in the formation of the Yellowstone wilderness.

Managers identified four distinct criteria that would be strictly followed in managing fires within the park:

1. Lightning-caused fire would be allowed to burn under natural conditions.
2. Any fire would be controlled if it threatened human life, property, or historic, cultural or special natural features.
3. All man-caused fires would be fought.
4. Prescribed burning would be used to reduce fuel loads when necessary.

In the 16 years the policy has been in effect, 140 lightning-caused fires burned about 34,000 acres. Most of those fires burned only a small area before they extinguished themselves.

Would this same policy work in Pennsylvania? Probably not for several reasons. First, the four criteria are simply not appropriate to Pennsylvania fires. Less than 1 percent of our state's fires are caused by lightning. When we have lightning, we also have rain. That's not true of the much drier West. Some 30 to 40 percent of Pennsylvania's fires are arson. The rest are caused accidentally due to human error in activities such as burning trash or clearing land. Therefore, the criteria listed above would dictate fighting almost all Pennsylvania fires.

A second factor working against this policy in Pennsylvania is the fragmented distribution of our public forest. Yellowstone is a solid block of more than two

million acres. Pennsylvania's forest is spread throughout the state and interspersed with private and commercial holdings. In almost all cases, a wildfire permitted to burn on state forest land would endanger forest property of private owners. Again, the criteria themselves would dictate fighting almost all Pennsylvania fires.

A third reason lies in the fundamental difference of forest types. Yellowstone forests are softwood conifers with some resistance to fire. Pennsylvania's hardwoods are not fire tolerant. Even surface fires, the most common fire type in our state, scar the vulnerable hardwoods and degrade their value. Hardwoods simply do not coexist well with fire.

Finally, and by far most important, the Yellowstone fire policy was never designed to apply to forests, such as Pennsylvania's, where timber harvests and recreation are high priorities. It is a policy designed for wilderness preservation and that is not a high priority in our state because little virgin wilderness exists here.

If the general public hears Smokey saying that forest fires are bad, but that they also have certain benefits, will that public also have the broader understanding to know just how limited those benefits really are? I worry about a new generation of school students, scouts and youth in general, who learn about the "positive" aspects of forest fires. Could it make them less careful? Could it make them less fearful? "After all," they might say, "even if the forest burns, there are certain good things fire brings with it!" Sorry. That sounds like being happy to watch your house burn because you won't have to give it that next coat of paint.

Any of us who work with young people—parents, teachers, scout and youth leaders—or who communicate with the general public must be careful with the perception we produce of forest fires. We can't simply list their good points and their bad points and let the subject rest. The dangers and costs of forest fires—both in dollars and in lost resources—are so staggering that any benefits pale before them. Smokey the Bear and his message must remain strong and in those isolated instances where fire can be a useful tool, its use must rest only in the hands of the professional forest manager.



I WAS SHIVERING slightly in the pre-dawn darkness of early May as I tensely gripped the 12 gauge. It wasn't the answering gobble of a big tom I was listening for, however, but the sudden squawking of frightened chickens. I was perched on the peak of a wet tin roof overlooking a barnyard, and squinting into the misty light of a 100-watt bulb hanging—for my benefit—from the chicken house. For several mornings a fox had been raiding the farmer's chickens, killing several before carrying one off, presumably to a den of pups somewhere in the surrounding hills. My job was simple: ambush it.

I had been issued fox traps upon assignment to my first district, eastern Berks County, but I'd never trapped a fox before, and the farmer didn't seem disposed to wait while I learned at his expense. As I waited I began to reflect upon the differences between the lush farmland of Dutch Country and the rugged, stony mountains surrounding my hometown of Renovo in western Clinton County. One of the starkest contrasts was that nearly all of the rural roads down here are paved, while back home they are dirt. Even the terminology was different. The Dutch called them ground roads, rather than dirt roads. And, there were pheasants here.

I'd never seen a pheasant around Renovo. But in the southeast, the harsh crowing of the cockbirds was heard everywhere. Occasionally, even the sweet whistling of a bobwhite could be heard in the thickets. In fact, there were so many pheasants that they were the primary source of wildlife damage complaints. Pheasants and crows both would march down rows of new corn, pulling up the shoots to eat the seed kernel clinging to the bottom. The first winter I was there I set a large wire pheasant trap to remove pheasants for a farmer who had hundreds congregating in his fields. But, that was 20 years ago.

I was awakened from my musings by a sudden explosion of chickens, cackling and reeling crazily about the barnyard. A sleek form darted in their midst. When the gun cracked the farmer and his family hurried out. The culprit was a vixen red fox, and in the seconds before I could bring the gun to bear, she had already killed two chickens and crippled a duck.

Damage complaints occupy much of our time during May. In Tioga County they most often took the form of beaver com-



**By Jack Weaver**  
**Wildlife Conservation Officer**  
**Centre County**

plaints, another new twist for me—there aren't a lot of beavers around Renovo, either. The primary wildlife species I was used to there were deer and rattlesnakes. But I learned to trap beavers—I had to.

The trap we normally used to live trap beavers was called a Bailey Live Trap. When set the trap looked much like a butterfly with its wings spread. The trigger was in the center, and when the animal swam over, the wings would spring shut, enclosing the beaver in a net of wire mesh. Thus captured, the culprit could be transferred, while inside the trap. The best way to set one of these traps was to knock a hole in the beaver's dam and place the trap in front of the hole. Then, when the beaver came in to patch the hole, he would get caught. That was fine, except it worked about only a third of the time. More often than not only half of the trap would close, sending the beaver rolling across the pond. Rarely did one ever come back for a second chance. Today it's much easier, we catch them alive and unharmed with snares.

About a half mile from my home in Tioga County, near the village of Cherry Flats, was a neat little bungalow beside a man-made pond lined with birch and aspen trees. But the picturesque scene was disturbed when a beaver decided to make his home in the pond. A tangle of peeled limbs and pointed stumps was all

that remained of most of the trees. I was called in to evict the rascal, but this was no ordinary beaver pond and no ordinary beaver.

Short of bringing in a backhoe and taking out a section of the dike, there was no way to make a hole in the dam for the beaver to patch. Undaunted, I set the big Bailey Trap at the back end of the pond where it was shallow and spring fed. I baited it with a special lure concocted by LMO Dave Brown. It's a deadly lure, even for May. That night the beaver got rolled—literally. Only one side of the trap went off. I reset it, but the critter was done with Bailey Traps, come what may. Meanwhile, trees kept falling and the landowner, patient as he was, demanded results. So I set some leg-hold traps in the critter's feeding areas. They were good sets too, but this beaver must have had prior experience with these devices. He never came near them.

Unlike most beavers he didn't build a lodge, and a diligent search of the pond revealed only one den hole. Directly in front of the bungalow was a mound from which two stately hemlock trees protruded. There was a stone wall fronting the mound at the water's edge, next to a boat dock. A couple of stones were missing at the bottom of the wall and a tunnel led into a spacious den under the mound. There was no trail of chewed twigs leading into this den. Nothing was visible above either, except a small vent hole on top of the otherwise natural mound. This was an old bachelor, wise in the ways of traps and men. For a moment I considered a body-gripping trap, and even my 270 Remington. Then I remembered a trick an old outlaw taught me that would chase a beaver out of his lodge real quick—house-

hold ammonia. "Pour it down their air hole and out they come," he said.

I called Lynn Keller, my neighboring officer, and asked him to meet me at the dam. "Bring your hip boots," I said.

When we met, Lynn took one look at the bottles of ammonia and the burlap sack and asked, "What kind of trouble are you getting me into now, Weaver?"

"No trouble at all," I assured him. "We're going to sack a beaver." I led him to the mound and explained the situation.

"And who is going to hold the sack?" Lynn asked.

"You got the boots," I said. He held them out to me. "Won't fit," I assured him.

Lynn pulled on his boots and peered skeptically into the water. At the base of the wall the water was only three to four feet deep. A few inches out it plunged sharply into unknown depths. "Get ready," I said, not giving him time to think as I held the open bottle of ammonia over the air vent. Lynn, grabbed the sack and stepped into the water. He was strangely silent as he held the open bag over the den entrance. Of course, it's hard to talk bent over, with your mouth under water.

"Ready?" I asked. Bubbles with exclamation points raised up around his face. I poured the ammonia into the hole and soon heard a thrashing sound in the water. Looking up I saw Lynn floundering backwards, squinting, waving his arms and coughing. I grabbed him, looked at the empty bag and exclaimed, "You missed him!"

Lynn's eyes flashed open and he choked, "Missed him my foot! He never came out, but I nearly drowned holding this sack!"

"Well, get ready. I have another bottle."

"Just a minute," Lynn said. "Let me get

## WOODWORKING for WILDLIFE: Homes for Birds and Mammals

The Pennsylvania Wild Resource Conservation Fund (income tax checkoff fund) and the Game Commission have produced a 60-page booklet full of detailed plans and related information for people interested in building and erecting wildlife nesting devices. From bluebirds, screech owls and ospreys to raccoons, squirrels and even turtles, easy to follow directions for building 22 proven homes and other devices for wildlife are provided. Order *Woodworking for Wildlife* from the Game Commission, Department AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Price is \$3 each, delivered.



some sticks to help hold this bag." Glad to see Lynn really getting into the spirit of things, I went back to the jeep and got a flashlight and a pick. When I came back Lynn was tying the open end of the sack to some sticks. I operated around the vent hole with the pick, enlarging it somewhat. But the hemlock roots formed a veritable fortress over the den, and I couldn't expand the opening very much. Peering inside with my flashlight, I could see some chewed sticks lying on the bottom. The ammonia smell was horrendous.

Meanwhile, Lynn waded back in the water and got ready. I poured the other bottle of ammonia into the den and waited. Nothing happened. "I don't believe anybody's home," I said weakly.

"I don't believe you talked me into this, Weaver," Lynn said. I could tell he was getting discouraged again. So I reached back to my side and brought out my 357 revolver.

"What are you doing now?" Lynn yelled.

"Just get ready," I said. "I'm going to scare him out." I jammed the muzzle into the hole and touched off two small explosions. Lynn was mumbling, but I could see he was braced with the sack.

You know, we never did catch that beaver. But he never showed up on the pond again, so I guess we solved the problem.

In Centre County, damage problems in May center around squirrels and bears. Recently, more bears than squirrels. The historic homes in Bellefonte are generally surrounded by stately old trees. Both make excellent cover for squirrels. Complaints of squirrels in attics can generally be remedied using a trap baited with peanut butter. Bears are another matter—especially when they're in downtown Bellefonte . . .

I was trying to do reports one fine May afternoon in '83 when my phone suddenly went berserk. The first caller yelled excitedly into my ear that he had just seen a bear running down Curtin Street. Great, just what I needed, a misguided bruin deciding to go domestic. "Just leave him alone and he'll probably head for the woods," I said.

I no sooner hung up and settled back into my reports when the phone rang again. "I just saw a bear in my back yard," the frantic caller exclaimed.

"Leave it alone and it'll go home," I said.

"I'm afraid it's too late. Some people are chasing it with brooms," the caller replied.

Before I could reach my jacket the phone rang again. It was the Bellefonte Police. A bear was up a tree in someone's yard on Lynn Street. I asked them to clear everyone out and said I'd be right over. I arrived ten minutes later. There was no problem finding the place. The Bellefonte and Spring Township Police were there, complete with riot shotguns, along with a mob of people including the mayor, an ambulance, a fire truck, and a reporter from the Centre Daily Times. So much for simplicity.

At the time I wasn't trained to tranquilize bears. My neighboring officer George Mock was, but he wasn't available. The next closest certified officer was WCO Tim Marks, from Milroy. We radioed Tim and he said he would come right over. We had a ladder ready when Tim arrived. He armed his eight-foot prod with the proper dose of "tranquility," based on our best guess of the animal's weight, somewhere around 250 pounds. Then he climbed up the ladder, amidst the flashes of camera strobes, a wave of ahs and ohs, and the clacking of the bear's teeth. The tree was a big old oak and, fortunately, the critter had wandered out on the first big limb it came to. Still, it was about 20 feet from the ground. Tim approached from the tree trunk side of the bear, to keep it from climbing higher. When he jabbed the needle home the bear ran farther out on the limb. Everything was going great, we thought, while waiting for the drug to take effect.

We didn't wait long. The bear soon began to sway drunkenly. Then I noticed the shed. It was a brand new aluminum utility shed, sitting smack under the doped up bear. There was just no way that bear could miss it. It was getting to be one of those days.

We quickly moved the ladder to the other side of the bear, and Tim climbed back up and tapped the bear with his prod. The poor thing tried to jump back, but the drug seemed to take full effect in mid stride. It landed on the limb, head and shoulders on one side, rump hanging over the other. And out cold.

Now, volunteer firemen are great people, but all of us holding onto a blanket in hopes of catching a 200-pound bear was not the best of ideas. The intricate system of ropes and pulleys that was proposed didn't seem practical either and the landowner didn't like the chainsaw idea at all. We settled for a truck load of used tires

which we spread on the ground and safely broke the animal's fall. We even missed the shed, barely. No pun intended.

Tim removed a tooth for aging the bear and checked her ear tags (she was a two time loser) and asked the next logical question, "Where's your bear trap?"

A culvert bear trap is mounted on wheels so we can pull it like a trailer. That's how we normally haul bears from place to place. But, again, this was just one of those days. My trap was miles away, set at another complaint site. I explained all this to Tim and pointed out that I had to be in Jersey Shore inside an hour, for a meeting I just had to attend.

"Take her with you," Tim replied.

"Oh sure," I said. "Just plop her in the back of my . . . now wait a minute, Tim!"

"Sure," he said, standing there grinning like an opossum. "We do it all the time. I'll give her a few more cc's to keep her quiet."

"What if she wakes up on the way? What if she wants out?"

"Drive with the back window down," Tim replied, serious as a fool can be.

"Suppose she wants to come out the front?"

"Make sure you get out first," Tim said.

Well, I didn't have time to argue and I couldn't leave the bear in the middle of town, so we loaded her up and off I went—with the back window wide open and one eye on the rear view mirror. When I got to the office Francis "Fritz" Hartman was standing outside. Fritz was the evening caretaker and radio operator. He was also disposable. "Fritz, how about doing me a favor," I asked.

"Sure, Jack, what do you need?" he replied. (I love such dedication.)

"There's a bear in the back of my Bronco. While I'm attending this meeting, how about releasing her out along the Coudersport Pike somewhere?"

"Sure," Fritz said. Then he caught on. "Where's your trap?" he asked.

"I don't have one," I innocently replied.

"Well, where's the bear?" he asked. He was really beginning to catch on.

"In the back of the Bronco," I said while darting for the door.

"Now wait a minute!" said Fritz.

"Hey," I explained. "The bear got an extra shot before I left Bellefonte. She'll be out for at least another hour or so—no problem."

Then George Mock, who had just pulled in, casually remarked as he walked, "Looks like that bear could wake up any minute." Fritz was really beginning to get nervous, but I assured him over and over that everything would be fine if he would just hurry up!

After the meeting Fritz met me in the hall (lunged for my throat, really). I knew right away something must have gone wrong. "Whoa," I said. "Did the bear wake up or what?"

"No!" Fritz exclaimed. "It's your plastic bags. What are you doing with black plastic bags in the back of your Bronco?"

"They're evidence bags, Fritz. Why?"

"I was going down the road, with the back window down and my eye on the rear view mirror." (Sounded familiar.) "George's remark wasn't too reassuring you know. Anyway, I heard this rustling in the back of the vehicle and I saw this big black thing slowly rise above the back seat. Ever try exiting a vehicle at 55 miles an hour?" he asked.

"No," I admitted.

"Nearly got killed passing a truck!" he exclaimed.

"Well, did the bear wake up or what?" I asked.

"No!" he exclaimed. The wind caught one of your black bags and sent it up in the air!"

I quit laughing when Fritz went for my throat again. But he did get the bear safely released in time. When he let down the tail gate, the bear walked out on its own, fully awake. Who says things are boring in May?

## Thoughts While Walking

*Ideals are like stars; you will not succeed in touching them with your hands. But like the seafaring man on the desert of waters, you choose them as your guides, and following them you will reach your destiny.*

—Carl Schurz



# Thornapples



Chuck Fergus

**H**EITHAR was a market hunter. He stood maybe six feet tall, weighed about 170, was lean and weather-hardened. His hazel eyes were bright and wide-set; his mouth wide, lips thin, a craggy face, open and frank, typically Icelandic.

He wore blue nylon wind pants, snow gaiters, heavy lug-soled boots, and a camo parka over a thick brown turtle-neck sweater; orange watch cap, orange gunning vest, a leather belt strap for carrying his birds. His Belgian Browning over/under 12-gauge was choked modified and full, the stock deeply scarred, with swivels and a sling. It was November 11; the season for *rjupa* (pronounced rYOU-pa) was four weeks old, and Heithar (HAY-thar) told me that so far he had killed 200.

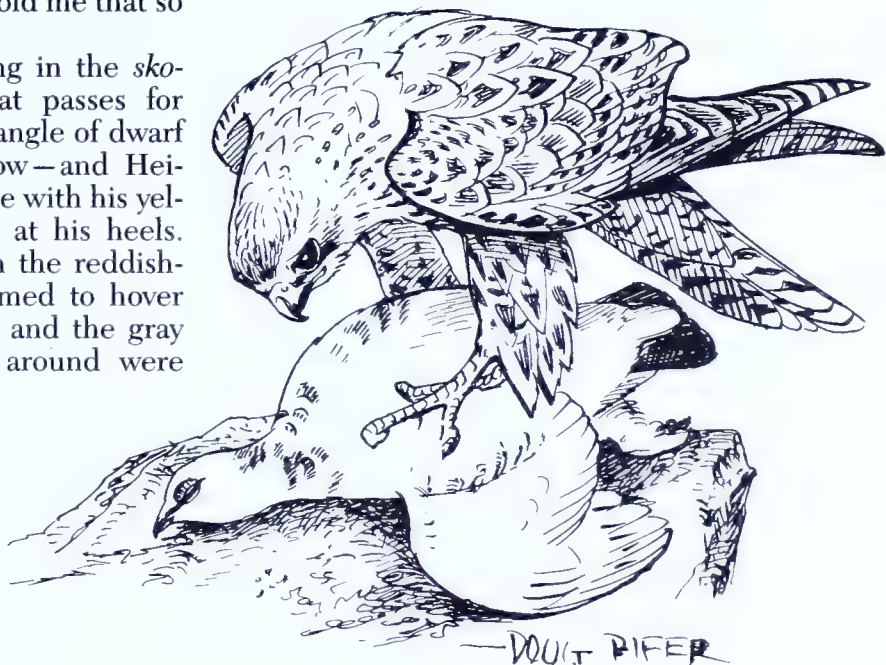
We parted in a clearing in the *sko-gar*—the woods, or what passes for woods in Iceland, a shintangle of dwarf birch and creeping willow—and Heithar moved swiftly upslope with his yellow retriever pup, Nora, at his heels. I picked my way through the reddish-brown brush, which seemed to hover between the white snow and the gray sky. The mountains all around were

steep, their snow cover showing a faint stippling of black rocks. Behind me the fjord was gunmetal.

When I next looked, Heithar was well up the slope and yards in front of me. As I watched, two birds went out. White as the snow, they flashed above the low cover. One had already fallen and the second was collapsing in a puff of feathers when the report from Heithar's first shot reached my ears.

When we got back together again I examined the birds. They were trim, compact, and muscular, like the ruffed grouse, to which they are related. Their wings were stubby and short. Their feathers were pure white except for black vanes on the outer primaries, a black zone behind the bill, and a stubby black tail interrupted in the middle with white. Above each eye shone a small wattle of orange-red skin; the bill, black, was short and slightly down-turned. The feet were feathered, owl-like, to the long gray nails.

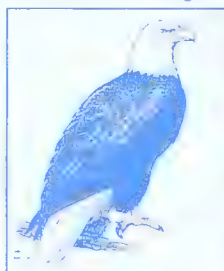
"Last month I was up here for six days," Heithar said in his excellent English, "and shot about a hundred *rjupa*. Then on my way back home I stopped on the pass near Borgarnes and shot 47 in two hours." He explained that on a good day he might encounter 200 to 300



—DOUG RIFER

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birds and kill 20 to 100 of them; on an average day he would bag 15 or 20. Although he plainly enjoys hunting them, the pursuit of *rjupa* is not a sport for Heithar, who does not pass up shots on the ground. He spoke with pride about killing 11 with one shot: they were walking in a line, and he edged around to one side so that his shot raked the length of the column. He sells his birds to restaurants, markets, and private buyers in Reykjavik, the capital city, for 300 crowns each—a bit over \$6. You can buy *rjupa* in the stores for \$10; in a restaurant it will set you back three times that amount.

### Shot Three Birds

I am sorry to report I did not taste *rjupa* during my stay in Iceland. I shot three birds on Botn, the 10,000-acre farm where I hunted with Heithar, and left them there with the farmer to age in his machine shed. Customarily, a *rjupa* is hung for three to four weeks, ungutted, head elevated so that the juices from the crop contents—buds, berries, catkins, small leaves—permeate the breast. The breast meat, which is dark, is served in a rich sauce and is said to

taste of birch, one of the birds' primary foods.

Back in Reykjavik I called on Aevor Petersen, an ornithologist with the Icelandic Museum of Natural History. I learned that the *rjupa*—the rock ptarmigan, *Lagopus mutus*—is circumpolar, found also in Alaska, northern Canada, Greenland, Scandinavia, and Siberia, and in scattered enclaves in the Alps, the Pyrenees, and northern Scotland.

The population in Iceland is large, and Petersen doubted that hunting—for sport or the market—has any real effect. "As with your grouse," he told me, "the population is cyclical." He spoke his English with a British accent. "Nobody knows how many birds are killed each year. I would say 150,000 in a year of peak population." The cycle lasts for 10 years, with the population peaking about the middle of each decade, then falling for five years before starting to build again.

When the cycle is up, *rjupa* are everywhere. Gyrfalcons and Arctic foxes (Iceland's only native land mammal) eat almost nothing else. The birds wander into towns and villages, roost on rooftops, and feed on weeds at the edge of the road. Everybody dines on *rjupa* for Christmas (it has been traditional yule fare for the last 40 or 50 years). Then, without fail, the bottom falls out: *rjupa* are hardly seen at all; foxes and gyrfalcons grow lean. "In years when the *rjupa* are scarce," Petersen said, "many gyrfalcons do not nest at all." The hunters usually become alarmed and clamor for the season to be closed. And, closed season or not, ptarmigan numbers mysteriously start building back up again.

Petersen told me that few *rjupa* are found in Iceland's interior—the land there is mostly ice, volcanic rock, and ash. Most of the birds live along the coast, on offshore islands, and in the mountains fringing the inhospitable heartland.

In spring, as the snow begins to melt, the ptarmigan molt. Their white plumage is slowly replaced by an intricately mottled brown, painting them into a





landscape of sun-dappled earth, heather, and lichen-spotted rock.

The male *rjupa* stakes out a breeding territory with a lookout—an isolated rock, a grassy hummock or knoll. From this prominence he watches for trespassing males—which he promptly and vigorously drives off—and willing females. The basic masculine advertisement is a sort of aerial dance in which the cock leaps from his perch uttering a loud belching call, flies swiftly upward, alternately flapping his wings and setting them and sailing, rising as high as 250 feet; then he swells his neck and bows his wings and, all the while making that odd crepitant sound, slowly parachutes to the ground. He lands smartly and assays a bit of a dance, wings drooping and tail spread, head tilted to show off the swollen blood-red eye wattles.

By the peak of the mating season the female's molt is complete, her camouflage perfected. The male's head and back have gone brown, but his breast remains a bright, attention-grabbing white. The gyrfalcons zero in on the males (knocking off up to one-third of them) while the biologically more valuable females sneak off to nest.

The female *rjupa* nests on the ground, in creases or furrows between

soggy tussocks, sometimes shielded by a crowberry or heather shrub. An industrious layer, she seemingly possesses a need to cover her own little patch of earth with eggs. People used to place a stick in a *rjupa* nest, then come back for the eggs that would pile up. An old Icelandic saying describes an energetic person as *rembast eins og rjupa vith staurinn*: "striving hard as a *rjupa* at the stick." Petersen, when he translated the saying for me, added with a smile, "I have not researched the biology of this."

Left to her own devices, the female lays an average of 11 or 12 eggs. When the population is increasing, up to a quarter of the young survive; when the cycle is trending down, only three or four percent reach adulthood.

### Easy Pickings

As winter approaches, the *rjupa* regain their white plumage. They are easy pickings for falcons if the snow is late, and when the snow is patchy, the hunters know just where to look. The birds tend to gather in flocks, often temporary groupings of five to 30—sometimes up to 1000—individuals. Unlike their sedentary cousins, the ruffed grouse, *rjupa* are capable of sustained flights. They may move ten miles or farther from low-lying breeding grounds to higher elevations where snow has already fallen. People have seen flocks fly straight up into the air, level off at

several hundred feet, and disappear over the horizon. Each year birds arrive from Greenland, 250 kilometers distant. *Rjupa* have landed on ships at sea.

Once cold winter weather sets in and snow covers the uplands, it is problematic to predict where these peripatetic birds will be.

At the farm Botn, before Heithar arrived, my friend Venni (the name is short for Vesteinn, which means "sacrificial rock," and you don't even want to *try* to pronounce it), his brother-in-law Einar (AY-nar, the tenant farmer at Botn), and I did a little hunting. I was using a Winchester 12-gauge semiautomatic borrowed from Venni's cousin, who worked at a salmon-raising operation nearby. The shells were British, number 5 shot, rather low velocity, which tended to make them jam. Einar's hunting attire consisted of a long green coat, blue jeans, black knee-length slip-

on rubber boots, a green watch cap, and a game vest fashioned from two blood-stained mail sacks held together with string; he shot a rust-pitted 12-gauge single-shot of Russian manufacture.

We hunted high and found only a couple of skittish *rjupa* on the mountain pass, where the snow whipped by on a stiff wind. We didn't find them in the lowlands, either, in the heath. We found them in the birch brush and, slightly higher, in the jumble of rocks just down from the lip of the mountain.

The footing was dicey, and the soles of my L. L. Bean Maine hunting shoes were not designed for negotiating steep snow-covered scree. Still, I killed the three birds, wingshots all, one on a swift clattering rise out of the brush. I do believe the bird flew faster than a grouse, and when it cleared the low cover it gave me a fair mark. I could have shot a dozen more on the ground.

## Fun Games

### "SPRING'S SPECIAL SURPRISES"

By Connie Mertz

Throughout Pennsylvania's forests, farms and wetlands are many newcomers to the wildlife community. Can you match the parents with their young? (One answer is used more than once.)

- |                               |             |
|-------------------------------|-------------|
| _____ 1. Black Bear           | A. Kits     |
| _____ 2. Mourning Dove        | B. Kittens  |
| _____ 3. Bobcat               | C. Pups     |
| _____ 4. Beaver               | D. Fawn     |
| _____ 5. Otter                | E. Calf     |
| _____ 6. Raccoon              | F. Leverets |
| _____ 7. Hare                 | G. Cubs     |
| _____ 8. White-tailed Deer    | H. Squab    |
| _____ 9. Elk                  | I. Poults   |
| _____ 10. Eastern Wild Turkey |             |

answers on page 64



Pocket room for . . .

# Archer's Extras

By Keith C. Schuyler

SOME ARCHERS carry enough in their pockets while hunting to feed and equip at least a squad. It's just as true that others carry only the bare essentials and may come up wanting. Somewhere in between these extremes is the need for some extras to cover anticipated needs or the rare emergency. Accessories can at the very least eliminate inconveniences, or at the worst, save a life.

None of these extras have any direct bearing on whether or not you will be successful with the bow and arrow. Their likely use is determined somewhat upon whether you are on a quick sojourn to the nearest woodlot before or after work, or on a full-fledged safari to the back country.

Pockets, mostly for show on dress clothing, become useful for the archer who is trusting to work clothes, or is more practically dependent upon a camouflage suit. You will note that the hideaway outfits feature copious and deep pockets. They will accommodate a considerable accumulation of candy wrappers, animal scents, coins, tissue paper, handkerchiefs, forgotten grocery lists, errant leaves and other forest debris—none of which has any direct bearing on shooting a game animal.

Two pockets must be reserved for a wallet and colored handkerchief. (Never use a white handkerchief; it might be mistaken for a deer's flag.)

It's amazing what collects in pockets



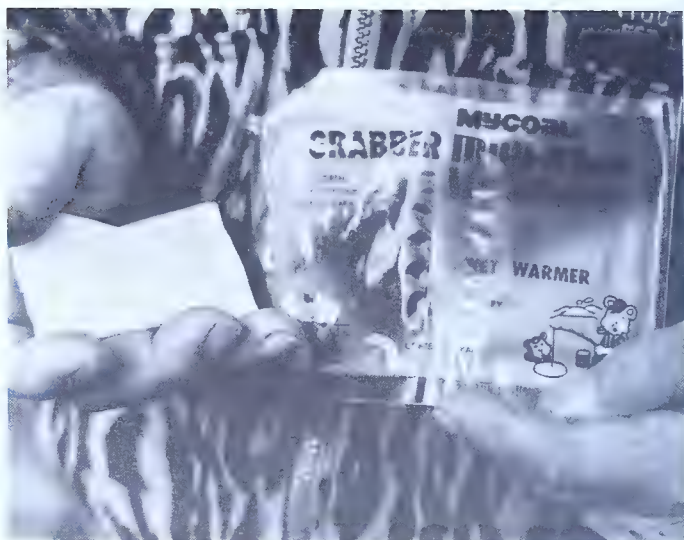
**IF YOU DON'T** wish to lump up your pockets, or there isn't room for everything you want to carry, there are handy belt packs for the overflow. What you *should* carry, however, can probably be narrowed down.

that become evident only when the mistress of your manor insists that you "get those filthy things in the wash!" Unless, perhaps, you are one of those who insists upon washing his clothes after each hunt or are among those who prefer to dunk such attire in deer droppings, smellstop, fox urine, or worse.

There is a choice. If you don't wish to lump up your pockets, or there isn't room for everything you want to carry, there are handy belt packs for the overflow. What you *should* carry can be narrowed down to what might be considered necessary nonessentials for your well-being.

How often, after a deer has been killed, have you discovered that neither you nor your companions can come up with a dragging rope? Off come belts while owners risk loss of dignity or

**HAND WARMERS**, right, take up little space yet provide instant heat for hours—something every hunter could have used during the opening day of last year's antlerless deer season.



**A RELIABLE** flashlight, kept secure on a short lanyard, is nice to have in the event of many emergency situations, or just to make getting out of the woods at night a little safer.



**NO DEER HUNTER** should head afield without a good knife, such as the folding lock-back, left, which takes up little room in pocket or pack, and rope for dragging out the quarry. Parachute cord, above, takes up little space and works well when tied to a dead limb.





being tripped up by trousers around the ankles. Depending upon the size of the animal, it can be a struggle. Some commercial dragging ropes are big enough and strong enough to tow a tank through a swamp. One of these, or a length of leftover clothesline, can bulge one large pocket.

An answer to this need is a length of parachute cord or similar line, with the ends singed to prevent unraveling. Wrapped upon itself as shown here, it uses little more space than a roll of coins. When needed, find a short dead limb for a handle, tie the cord fast in the middle with a timber hitch, and fasten the other end to the animal. You have an instant drag rope that can be reused time and time again.

Do you leave the heart and liver behind after field-dressing a deer? It is little short of immoral to waste this excellent food. A couple gallon-size Zip Loc bags, or Game Commission SPORT bags, will lay flat in a pocket and provide leakproof receptacles for both when needed. They can also carry a supply of jerky for warm weather and chocolate candy when it is cold.

To project a macho image, some hunters fasten a sheath knife to a belt, where it catches on the bowstring or the bow itself. Hiding it beneath a jacket works, but diminishes the macho image. A good, medium to large size pocket knife will do everything needed for hunting and camp cutting, yet it can be nestled unobtrusively in a pocket. There are numerous choices, but I have found the Gerber (a gift) shown here, to be most practical.

If you do much afternoon hunting, a flashlight is often a necessity. Should you become uncertain of your position (bow hunters are never lost), the flashlight might prevent a dangerous tumble

or the need to spend a night on the mountain. The one pictured here, a Garrity, was a thoughtful gift from my bride. It's waterproof, shockproof, and uses two AA batteries. Further, it has a lanyard which fits around the belt so that it can be dropped into a pocket or hand held without uncoupling for use.

During the cold months, an archer's hands are most vulnerable to the temperature. Because a finger tab, artificial release, or bare fingers are used on the string hand, gloves or mittens are cumbersome and a handicap for quick action. There is more leeway for the bow hand, as its job is not as critical, but hand wear thin enough to permit proper feel of the bow grip doesn't keep out the cold when the thermometer is on a slide. The first day of last year's regular antlerless deer season was a good example.

### Minus Four Degrees

Where I stood the temperature was minus 4 degrees. Yet, my hands were fairly comfortable as long as I kept them in pockets where I had Grabber Mycoal disposable hand warmers. These amazing packets produce heat up to 140 degrees for about seven hours when unpacked and kept in a small confined area, such as a pocket. Larger ones can be used to heat any part of the body for around 20 hours. If you can keep the small of your back warm, you will usually be comfortable all over. One of these larger warmers can be placed between light undergarments and heavier outer wear to serve this purpose. Popularity of the Grabbers was such that last winter we had trouble finding stores that were not sold out of them.

The old style hand warmers, those that operate on lighter fluid, will work. However, some are cantankerous units that test your patience more than the temperature.

A compass, coupled with the ability to read and use it properly, can help a hunter out of trouble in big or strange territory. Then there are times when a heavy snow, fog or black of night can distort landmarks in even familiar areas.



## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

A compass can save a lot of unnecessary walking or avoid a truly dangerous situation.

One time I lost my four-months pregnant wife on a deer hunt, where taking a wrong direction could have been fatal as developing snow and limited hours created a situation fraught with hazardous implications. My state of mind and her safety were pinned to a compass I had given her before the hunt, along with instructions on how to use it. When we finally found her, she had traveled several miles over extremely rough and wooded terrain, and was in the car with fresh makeup on—ready to go again. A

compass, however, is useful only if you know how to read it and know at least the general direction you want to go in.

Another essential to a remote hunt is a waterproof container filled with waxed matches. An economical approach is to fit an empty 20 gauge shotgun shell into an empty 16 gauge one, or the 16 into a 12 gauge. In an emergency, the matches can start a warming fire to ward off the chill, or be used to build a smudge fire as a beacon to would be rescuers. As an alternative, a butane cigarette lighter with visible fuel can be carried. It should be tested for performance occasionally, and fuel level should be checked.

Those who use tree stands face hazards that would fill this column. But dependence upon these high chairs includes knowledge and equipment that won't fit in pockets.

All of the items mentioned can be easily carried in one large pocket or distributed among the many a jacket and trousers provide. One man's necessity, however, may be another's convenience. A broadhead puller, arrowhead sharpener, camouflage cosmetic kit or tube, set of hex key wrenches (for compound bow users), pliers, screw driver, dental floss (to replace string nocks) all have their uses. I carry these and a few others in a canvas bag.

In the car.

## Cover Painting by Mark Anderson

It wasn't very long ago that the eastern bluebird was among the best known and loved songbirds. But over the past several decades bluebird numbers have declined to only a fraction of what they once were, largely because of the introductions of the European starling and house sparrow, which more often than not drive the bluebirds from the cavities they need for nesting. In more recent years, however, both amateur and professional conservationists have rallied to the bluebird's aid. Countless artificial nest boxes are built and erected specifically for bluebirds every year, and timber management practices have been implemented to save nest sites. As a result, the future of the eastern bluebird seems assured.

A limited edition of 1000 signed and numbered fine art prints of this month's cover are being offered by the artist. Image size is 11 1/2 inches square, printed on 17-inch square acid free paper. Cost is \$73.90, each, delivered; 50 artist's proofs are also available for \$90 each, delivered. Order from Mark Anderson, R.D. 3, Box 72, Tarentum, PA 15084.





**WILDCATTERS** have been experimenting with 17-caliber cartridges for many years, and in 1971 it became available commercially, with the introduction of the 17 Remington.

# The Forgotten Varmint Cartridge

**By Don Lewis**

**Photos by Helen Lewis**

**"DO YOU REALLY** think that 25-grain copper-clad sliver of lead you're using will drop a whistle pig at better than 100 yards?" my 244 Remington-toting friend asked. "It's more than 200 yards to the stump pile. You don't have the right cartridge for that distance. I suppose I'll have to do the shooting if we want woodchuck steak for dinner."

"Don't be downgrading a cartridge you know nothing about," I cautioned. "The 17/223 has some pretty impressive ballistics, and it will reach the chuck at that stump pile with no problems. The load I'm using chronographed at 3875 fps at 15 feet from the muzzle. That means this load is running about 3900

fps right at the muzzle. According to some current loading data, the 25-grain slug can be pushed over the 4000 fps mark, but I stay clear of hot loads."

"If you'll stop chattering for a few seconds, I'll record the first kill of the evening," my friend said with an air of confidence.

## No Distinct Thud

I picked up the chuck in my binoculars at the same instant my buddy fired. His shot startled me, and I lost the chuck nearly as quickly as I had found it. I wasn't sure what happened, but I didn't hear the distinct thud of a bullet hitting home.

"Jot down number one on the score



**LEWIS**—obviously before fluorescent orange hats were required of woodchuck hunters—tested several 17-caliber rifles. While no match for many larger cartridges, he feels there's definitely a place for the little varmint.

sheet," he said smiling. "I just hope the loss of one won't keep the rest underground."

We bantered back and forth, good naturedly, and I was busy explaining the makeup of the Harrington and Richardson 17/223 when my partner motioned toward the stump pile. A chuck was sitting upright on the same protruding stump.

"If the noise from your shot doesn't scare him in, we'll have two after my 244 cracks again," my buddy said.

### **Whip-like Crack**

I paid no attention to my talkative varmint hunting pal; I was concentrating on a steady sight picture. Compared to the bass of his 244, the whip-like crack of my 17/223 sounded like a soprano, but the chuck slid sideways from the stump and lay motionless.

"I can't believe it. That cartridge must be pretty potent to drop a chuck in his tracks. I'm going over to see exactly what did happen." Much to his chagrin, there was only one chuck at the base of that stump. A gash in the bark of a stump deeper in the pile was mute evidence of where his bullet had struck.

The 25-grain 17-caliber bullet hit behind the shoulder and never exited.

Some varmint hunters may think I'm wasting good space, writing about a cartridge that is chambered only in the Model 700 BDL Remington and rifles offered by a few custom builders. Some may also question the need for a 17-caliber varmint cartridge when we have such top-notch varmint shells as the 22 Hornet, 222 Remington and 22-250 Remington. Well, because the 22-250 very decidedly outshoots the Hornet and 222, why not drop those two, too?

That's only a hypothetical question, of course. I'm not in favor of dropping either cartridge. Both the Hornet and 222 have distinct advantages that are too important for the varmint hunter to overlook. The Hornet's low noise level and the excellent accuracy of the 222, up to 250 yards, are both fine attributes. The same holds true for the tiny 17. It is not a misfit that survived the wildcat era; it's one of the finest 250-yard woodchuck cartridges available today.

The 22 rimfire has long been the smallest cartridge most of us are familiar with. Until the 17 Remington was introduced in 1971, the 224 was the



**FOR COMPARISON**, the 17 Remington is shown here, going left to right, with the 223, 6mm and 25-06. Although it's more susceptible to crosswinds, Lewis feels the 17 is still a 250-yard cartridge.

smallest commercial caliber, and the 22 Short held the distinction of being the smallest cartridge in this country. However, it's worth pointing out that a man by the name of Jones necked down the 22 Long Rifle rimfire case to 14 caliber, creating a cartridge he called the 14 Jones. As far as I can determine, only a cartridge or two remains from that experiment. I have never found any loading data on the 14 Jones.

There was also the 14/221 Walker, made by necking down the Remington 221 Fireball case to accept a 14-caliber bullet. Later, experiments using modified Remington 222 cases and 14-caliber bullets were tried. According to loading data I have seen, those cartridges could push a 15-grain bullet out of the muzzle at better than 4300 fps, and a 20-grain bullet hit better than 3600 fps.

I don't know which 17-caliber cartridge was first on the shooting scene. A number of experimenters worked with this caliber. P. O. Ackley mentions the Modified 17 Hornet in his *HANDBOOK FOR SHOOTERS & RELOADERS, Volume II*. According to Mr. Ackley, Charles Stocking designed his 17 Hornet to get an effective 200-yard varmint cartridge that was low in noise level. Ackley says that Stocking has done extensive experimenting with 17s.

Ackley thinks the 17/30 Carbine (17 Pee Wee) might have been the first 17 caliber to get recognition. It is an M1 30-caliber Carbine case necked down to 17 caliber.

The O'Brien Rifle Company in Ne-



vada copyrighted the name 17 Mach IV, which is based on the 221 Remington Fireball case. The bottom of the neck is pushed back to form a 30-degree shoulder, making the neck longer and more suited to the reloader's needs.

Other 17 calibers carried fancy names such as 17 Flintstone Eyebunger. Its parent cartridge is the Remington 22-250. Ackley shows that maximum loads with this cartridge will produce muzzle velocities around the 4400 fps mark. There's also the 17 Javelina, a shortened, blown-out, necked-down 222. Ackley's 17 Bee is a 218 Bee necked down to accept a 17-caliber bullet. With a 20-grain bullet, muzzle velocity can reach 3800 fps.

Probably the hottest 17 caliber of them all is Ackley's 17 Magnum. Ackley necked down the Remington 222 Magnum to 17 caliber without any other change. With a 20-grain 17-caliber bullet, Ackley shows muzzle velocities above 4600 fps, and he claimed over 4000 fps with the 25-grain bullet using compressed loads.

I think it's reasonably clear by now that the 17 caliber is not just another fly-by-night wildcatter's dream, not an eccentric, inaccurate creation. I shot a





number of 5-shot groups, with both the H&R 17/223 wildcat and the Remington factory 17 cartridge, that rubbed the one-inch mark at 100 yards. That certainly makes the 17 a legitimate varmint caliber.

I'm a varmint wildcatter at heart. Not because I want something that most other varmint hunters do not have. I simply like trying to come up with a better mousetrap. When the 17 began surfacing here and there, I became interested. Back in 1969, I wasn't too sure it was anything but a novelty. But a few months later, I had an opportunity to use a Model 317 H&R 17/223.

### Moderate Load

RCBS was kind enough to furnish the reloading dies, and shoving a military 5.56mm case into a 17/223 resizing die reduced the neck size from 224 to 17. Nothing else was modified. Loading data was furnished by H&R, and I started with a moderate load of 4895 behind a Hornady 25-grain HP bullet. According to the data I received, the load I finally settled for was a grain or so under maximum.

My first groups were nothing to write home about, but I was still tinkering with various primers, powders and bullet seating depths. My early feelings that the 17-caliber speedster would be hard pushed to stay under 1¼-inches at 100 yards became more fixed in my mind when the fourth 5-shot group had its shots scattered just under 1½ inches.

**CHRONOGRAPHING** shows the 17-caliber, 25-grain bullet will travel around 3800fps, and for varmint hunting its potency need not be questioned.

But then I made a discovery. It's routine for me to check the stock screws after a few shots, and in this instance I was surprised to discover that the forearm screw was fairly loose. At the same time, I dropped down a grain of powder. Unfortunately, I don't know which of the two changes was responsible for bringing several 3-shot groups down to just under an inch. Later that day, I fired three 5-shot groups that changed my mind about the accuracy of the 17 caliber. My first group was a tight ⅝-inch, the second a smattering over one inch, and the final target had five holes in ¾ inch.

Some notes I jotted down at that time indicate my first shot at a chuck took place on a windy evening. The Model 317 carried a 4-12x Weaver, and the chuck was at the end of a field I had stepped off many times before. It was about 250 yards to the chuck's den, but strong crosswinds kept me from touching off a shot. Eventually, the chuck moved to a dirt pile a few yards closer, and when a slight breeze replaced the strong gusts, I sent a tiny 25-grain slug on its way. The chuck dropped, but I thought I had missed because there was no discernible movement. After a few seconds, the chuck rolled over. I had aimed behind the shoulder, but I suspect the mild wind moved the bullet slightly off course, as the bullet impacted almost at the end of the ribcage. Many times such a shot does not result in an instant kill and the chuck escapes. But the 25-grain miniature torpedo from the H&R froze the chuck on the spot. I think the rollover was due more to the steep incline than to the chuck not being killed instantly.

When Remington standardized the 17 caliber and offered it in their Model 700 BDL, I was fortunate enough to get one for testing, along with a good supply of factory ammunition. It didn't take me



long to install a 4-12x Redfield. I fired just enough factory ammo to get inside the 4-inch bullseye, and then began shooting 5-shot groups. My first one printed out at  $\frac{5}{8}$ -inch. I shot a half-dozen 5-shot groups over the next couple of days, but I never surpassed that first one. Spreads ran from  $\frac{3}{4}$  to  $1\frac{1}{2}$  inches. The larger groups didn't disappoint me, though, because it's impossible to be totally consistent with a non-competitive rifle. I came to the conclusion that both the H&R and the Remington could be relied upon to stay around the inch mark at 100 yards, and that's more than adequate for 250-yard chuck shooting.

The 17 is a high velocity cartridge, but it is not necessarily a long-range cartridge. The 25-grain bullet is no match for even a mild crosswind when shooting much beyond 150 yards, yet I classify the 17 Remington as a 250-yard cartridge. That still puts it head and shoulders above the 200-yard maximum of the 218 Bee and 22 Hornet.

The 17's potency can't be overlooked. Those who have hunted varmints with the 17 caliber describe the sound of its impact as something between a re-

**TURKEY HUNTERS:** Don't forget to report your birds. Harvest report cards are due within ten days of killing a gobbler. If you've already used your report cards, mail to the Harrisburg headquarters a post card with your name and address, license back tag number (including letter) and the date, county and zone of kill.

sounding "gersop" to a thudding "ker-plunk." I learned in a hurry that there are few exit holes in game the size of chucks shot with a 17. Prairie dogs and crows just about disintegrate from any solid hit.

Maybe I'm a voice crying in a wilderness, seeing as how there is not much hope the 17-caliber cartridge will be widely accepted by the varmint hunting fraternity. Yet it's unbeatable for hunting in congested areas because it's highly unlikely the 17's fragile 25-grain bullet will ricochet. It will never match the larger calibers for long range shooting, but this "Tom Thumb" of the varmint cartridges needs no apologies. It's a first class varmint cartridge, believe me.

**WILLIAM HIGHHOUSE, Warren,** was awarded a Game Commission Working Together for Wildlife print as a tribute to his efforts in building, erecting and maintaining bluebird and kestrel nesting boxes throughout Warren County. He is also active in the Northwestern Pennsylvania Conservancy and has provided invaluable assistance to the Game Commission.



# *In the wind*

bob mitchell



The Colorado Department of Natural Resources has presented the state legislature with a funding proposal that includes not only increased hunting license fees, but also a one percent state sales tax on outdoor equipment. The proposal was made in an effort to get support for the state's wildlife management programs from more than just hunters and fishermen.

**Last November California voters approved a measure to increase the state's cigarette tax from ten to 35 cents a pack. Most of the \$600 million expected to be raised annually will be used for anti-smoking and other public health programs, but 2.5 percent (\$15 million) will be used as matching funds to restore fish and wildlife habitat in the state.**

From a release of 22 wild birds obtained from New York in 1975, Connecticut's wild turkey population has grown to 5500. Since 1981, spring turkey hunting has been permitted in designated areas of the state, not only to provide sport, but also to provide biological information and to keep the birds wary of people.

On average, each American uses the equivalent of one 100-foot tree every year. As reported in Slippery Rock University's "Alternator," such a tree measuring 18 inches in diameter, yields 200 square feet of inch-thick lumber, 87 square feet of plywood, 59 square feet of insulating board, particle board and hardboard, and 613 pounds of paper products.

The number of people charged with shooting deer at night in North Carolina last year was 479, down from the 604 arrests made in 1987. Officials with the state Wildlife Resources Commission attribute the decrease to a major operation conducted in 1987, when officers were called in from surrounding areas, concentrated in known jacklighting hotspots, and ended up nabbing 44 poachers in just one week.

**Of the thousand species of birds listed by the International Council for Bird Preservation as the world's most threatened, 30 are hummingbirds. Most hummingbirds live in South America, where each species has adapted to feeding on only one or two kinds of plants. Most of these plants have restricted ranges, however, which leave the dependent birds susceptible to any catastrophe that may affect their food source.**

Researchers at the University of Wyoming are developing tests that will enable law enforcement officers to determine the species and sex of an animal long after it's been processed. Technology to identify an animal from a single hair, and its sex from bone measurements, have been used for years, but when the only evidence is packaged meats, such determinations can't be made. With newly developed techniques, however, using raw or cooked meat, deer, elk and antelope can be identified. With another technique, the sex of an animal can be determined, based on the DNA present in the cells. With another new test, officials can determine if a piece of meat has been previously frozen.

South Carolina has become the first state in which a hunter who causes a hunting accident will be held liable on charges of criminal negligence. As reported by the Izaak Walton League, a hunter who shoots and disfigures or disables a person will be sentenced to at least 60 days in jail. If the accident is fatal, the shooter must be jailed for three months and possibly up to three years.

## ANSWERS:

1-G, 2-H, 3-B, 4-A, 5-C, 6-G, 7-F,  
8-D, 9-E, 10-I





## **Voluntary Waterfowl Stamp No. 7**

Pennsylvania's 1989 waterfowl management stamp, a pair of hooded mergansers by Orange, Virginia, artist Ronald Louque is the seventh "duck" stamp offered by the Game Commission. Funds derived from stamp and print sales are used for wetland acquisition, habitat development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. For a savings, the cost for five or more ten-stamp sheets, in any combination of years, is \$40 per sheet. The 1987 stamps will be available through December 31, 1989, at which time all remaining supplies will be destroyed.

Stamps are available at the Game Commission Harrisburg headquarters, region offices, Pymatuning and Middle Creek Wildlife Management areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints of this design are available from art dealers and galleries nationwide.



*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in **GAME NEWS**. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover book costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797.



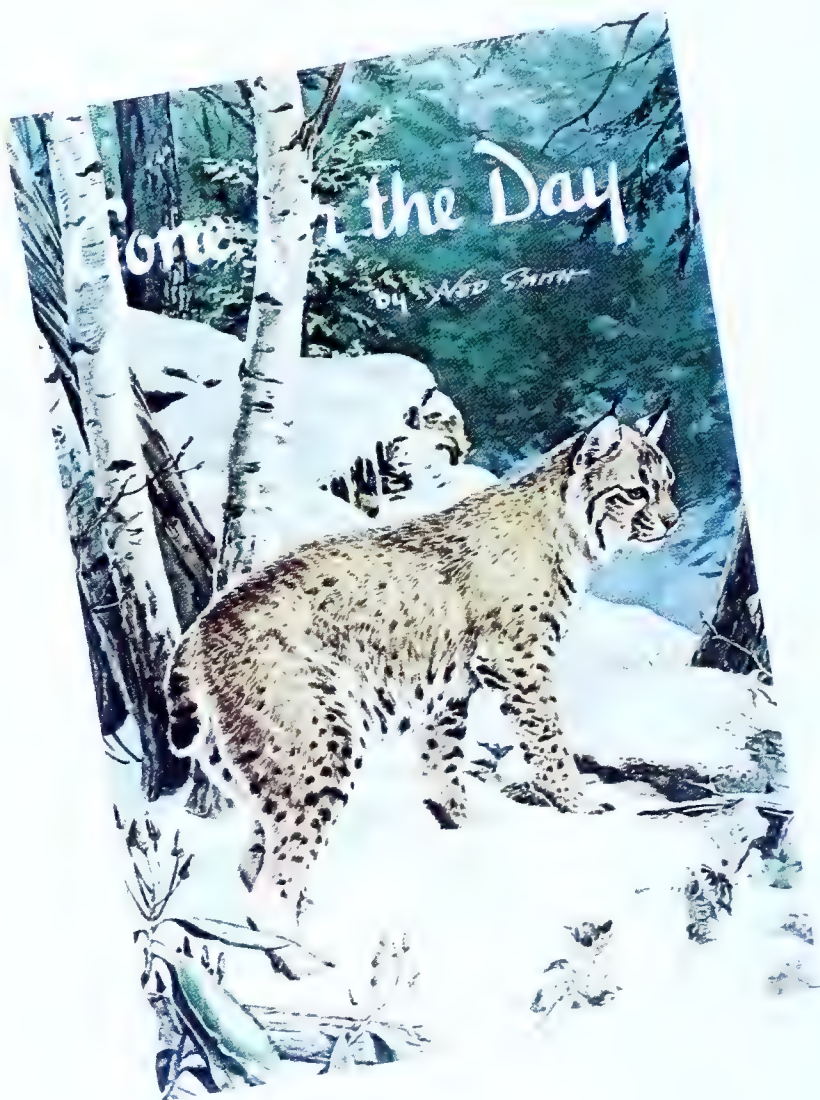
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JUNE 1989

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## Hunting & Changing Society

**M**OST OF us probably began hunting as youngsters by going along with our fathers, grandfathers or uncles. It's from them we learned of the sport and the excitement it offers. They were hunters, and it was only a matter of becoming of age until we, too, joined their ranks. It was a family tradition.

That scenario is basically true for most of us today, sociologists report, but not everybody; and in coming years and generations, that's likely to be true for fewer and fewer of us.

Although not yet apparent in Pennsylvania, the percentage of people who hunt has been gradually declining in recent years, and the decline is largely related to changes in society, changes that are eroding many family traditions.

Hunting has always been a male dominated sport, but that's changing, too. Although fewer people are hunting these days, the number of women participating in the sport is increasing. According to U.S. Fish and Wildlife Service reports, the number of women hunters nationwide increased from 418,000 in 1955 to 1.5 million in 1985. But unlike most males, who start hunting as teenagers with a parent or guardian, women, for the most part, are starting to hunt in their mid-20s, and not with parents, but with their husbands.

Hunting ranks are also declining because fewer youngsters are taking up the sport. Competition with school and civic activities are among the reasons for this, but perhaps most significant is the growing number of children being raised in single-parent households. It's been reported that only 40 percent of the children born in 1988 will still be living with both their parents by the time they reach 18 years of age. Most of those who do not will be raised by their mothers. Under such circumstances, youngsters receive little exposure to hunting and even less opportunity to actually participate.

These changes are important to wildlife managers, and they should be to hunters and others concerned about the future of our wildlife resources as well.

From an agency standpoint, the hunter education class is the most important contact with new hunters. To make young girls more welcome at these classes, resource agencies will need more women instructors; need to feature more women in teaching materials; and develop or modify course curricula and teaching techniques to accommodate older, women students.

Today's hunters need to recognize and address these changes, too. To get the women and kids involved, make hunting a family activity. Preseason scouting expeditions, plinking sessions, sightings in at the range, and cleaning and cooking game, all are good family activities that will foster at least a familiarity of the sport in everybody. And if you can, offer to take a youngster who might not otherwise have an opportunity to learn about the outdoors on some of your excursions.

Hunting isn't for everybody—man, woman, or child. But many women enjoy hunting—just look at the photo feature on pages 32 to 35—and nearly every kid likes the outdoors. We shouldn't take these groups for granted. We should encourage and support them. —*Bob Mitchell*





**ONE OF THE THINGS** I considered that day in the rain was the rain itself. For the most part the droplets struck the ground, splattered into smaller droplets, and soaked into the soil. But where did the rain water go from there?

## Considering the Rain

By Michael L. Morgart

**I** WATCHED the rain fall for a long time that day. I really had little choice; I could either leave my relatively dry shelter and walk the mile or more back to my truck, or I could stay put and hope the rain would let up. If I chose to walk, I'd be soaked in the first hundred yards, my scope would get fogged up or wet, and my day of hunting would more or less be over. If I stayed, my scope and I would at least remain dry, and I might even see some deer.

My shelter was a gigantic old white oak tree that had somehow survived the generations of logging that swept over the mountain. It was probably hollow and leaned slightly downslope, providing a man-size area of dry ground beneath its trunk. In that area I spent the

afternoon waiting for the rain to stop and considering the ways of the woods.

I enjoy deer hunting for a lot of reasons, not the least of which is that it's something I can do both as part of a group and by myself. I've had some great times hunting with my buddies, but it's also important to get out in the woods alone sometimes. A solitary hunter has a lot more opportunity to consider the woods than does one who has to spend time thinking about his companions.

One of the things I considered that day in the rain was the rain itself. I watched for hours as it fell to the ground and silently disappeared into the leaf-mat and soil layer of the forest floor. For the most part the droplets struck the

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ground, splattered into smaller droplets, and soaked into the soil. But where did the rain water go from there?

### As A Geologist

As a geologist, I knew the answer. Rainwater percolates down through the soil and enters the local groundwater system. The rainwater entering the groundwater system at the oak tree where I sat on Martin Hill flowed west for a thousand yards or so before exiting the system at the spring at Blankley Park. Although that's a relatively short distance for water to flow on the surface of the ground, the path is much more complicated underground, and therefore, the water travels much more slowly.

Gravity is the driving force that pulls rainwater down through the mountain's thin soil layer. A portion of the water is collected by the roots of plants growing in the soil. The remaining water, called groundwater, works its way farther down and begins to penetrate the resistant sandstone that is the mountain itself. The groundwater seeps into cracks and fractures in the rock when it can, but when no fractures exist it penetrates the very pores of the sandstone. Travel-

ing between the individual sand grains, it begins an exceedingly slow journey through the bedrock to the spring farther down the side of the mountain. The time it takes the groundwater to flow that thousand yards could be on the order of several years.

During the trip through the ground the quality of the water changes slightly. It begins to take on some characteristics of the humus, soil and rocks through which it flows. It picks up some minerals, such as iron and manganese, and it sometimes brings with it some minute forms of life, such as bacteria. But those things do not alter the flow as gravity draws the water on downslope to the spring.

Once the groundwater arrives at the spring at Blankley Park, or at any of the springs that ring the mountain, its pace suddenly quickens. No longer confined by the sandstone, it begins to flow freely down over the surface of the mountain. The small stream formed by the Blankley Spring drops about three hundred feet in less than one half mile before reaching the valley floor. Millions of years of flowing water have carved a channel for the stream to follow, and as the water from the rainstorm that I watched flows through that channel, it too will erode away a little more of the mountain.

Next, the little stream leaves the mountain behind and flows into a bigger stream. Cove Creek flows north through Friends Cove's 20 miles of farmland, woods, and rural homes. In that distance the water quality again changes as the water encounters its first pollutants introduced by man. As Cove Creek winds through pasture fields and farm lots, manure runoff flows into the water. Fields plowed too close to the water's edge, as well as logging operations and construction sites, add tons of sediment to the stream with every rain. Poorly installed and nonexistent septic systems add sewage to the stream, and carelessly dumped detergents, pesticides, and petroleum products seep out of the ground and into the surface water system. In its first 20 miles the quality of



**NEXT, the little stream leaves the mountain behind and flows into a bigger stream. The water quality again changes as the water encounters its first pollutants introduced by man.**

the water has undergone some pretty unpleasant changes.

Cove Creek is a tributary of the Raystown Branch of the Juniata River. When it meets the Raystown a few miles east of Bedford, the water from Cove Creek is suddenly mixed with the collected waters from a dozen other such streams, as well as waters from the industries, storm drains, and sewage treatment plants around Bedford County.

The Raystown Branch winds its way north to the Juniata River. The Juniata flows roughly east to the Susquehanna. Each of these rivers is somewhat larger than the last, and the area drained by each—its drainage basin—increases dramatically with the size of the river. The Susquehanna flows southeast through Harrisburg and on into Maryland and the Chesapeake Bay. By the time it reaches the Chesapeake, the rainwater that I watched fall on Martin Hill will have flowed through more than two hundred and fifty miles of streams and rivers to reach a point about one hundred and forty miles southeast of and nearly two thousand feet lower in elevation than my oak tree shelter.

In route to the bay the rainwater will have mixed with water from hundreds of other streams, each introducing its own variety of pollutants. In addition to sediment, farm, and domestic wastes, there will be industrial pollutants, mine drainage, petroleum products, road salts, and a large accumulation of good old American trash, ranging from styrofoam cups to refrigerators. In short, the rainwater won't be rainwater any more.

Approximately one half of Pennsylvania's acreage lies within the Susquehanna River drainage basin. That basin also includes parts of New York and Maryland, but by area, Pennsylvania is the biggest contributor. When you consider that the Susquehanna River supplies about 50 percent of the fresh water



to the Chesapeake Bay, it's easy to see how Pennsylvania has a major role to play in keeping the Chesapeake clean. Everything that goes into the groundwater or streams in that basin can eventually end up in the Bay.

### Finally Stopped

The rain finally stopped in time for me to make it back to my truck before dark. I never did see any deer that day at the oak tree, but even so I feel that my time there was well spent. It provided me with an opportunity to think about something as simple as rainwater, and something as complicated as the paths it follows when it hits the ground. Wouldn't it be nice if all of Pennsylvania's water was as fresh and clean as that rainwater from Martin Hill? I think the next time it rains in deer season I'll head back up to the oak tree for another afternoon of shelter and thought. Maybe by then we'll have cleaned up some of the problems faced by Pennsylvania's waters. But if not, maybe there will at least be more people considering them.

# A Season to Remember

By Thomas J. Edgington

**1986** was quite an eventful year for me. While it proved to be one of the most memorable of my 28 years, it could also be classified as one of my most difficult. To say the year started out poorly would be putting it mildly.

It was a blustery afternoon in mid-January when I said good-bye to my best friend for the last time. Dad had been fighting a losing battle against lung cancer for several months, and although I had time to prepare for the inevitable, it was still a bitter pill to swallow. Dad was a great teacher, and I had many questions left to ask and much left to learn.

The month of May found me adjusting to a new job. I had been transferred to a different location which brought about new responsibilities, new friends, and a 90-mile round trip to work every day. The summer months were spent finalizing wedding plans and getting our newly purchased house ready. My fiancée and I were married in August after three years of dating. To top it all off, two nights a week I was attending classes for my master's degree at the University of Pittsburgh.

By the time the month of November rolled around, I was ready to get out and enjoy the relaxation and peace that I had always found in Penn's Woods. I have always been a dyed-in-the-wool trapper, and to me there is nothing more relaxing than running a trapline on a crisp November morning. This year, though, it would be tough. I didn't have any vacation left, and night school and homework filled most of my evenings. I knew that if I was going to trap at all it would have to be done after work and on weekends. My father-in-law said he would run the line on the days I had school, so it looked like I would be able to do some trapping after all.

As I loaded traps into the back of my

truck one evening, I daydreamed about maybe this would be the year I'd finally reach my goal. Ever since I started trapping, back in 1970, I've always dreamed of catching at least one of every furbearer available to Pennsylvania trappers. Up until a couple of years ago, all I had left to trap was a mink. During the last couple of years, however, coyotes have become more prevalent in the state. So, reluctantly, I added the crafty coyote to my list.

By the time the second weekend of Pennsylvania's fox and raccoon trapping season came, I had caught four nice red foxes, a number of opossums and one smelly skunk. Saturday morning found me driving to a farm where I had heard reports of coyotes being sighted. I already had permission to trap on an adjacent farm, but I wanted to get closer to the area where the coyotes were being seen regularly.

As my truck skidded to a stop along the gravel lane leading to the barn, I spotted the farmer working in his corn-crib out back. I jumped out of the truck and headed over to introduce myself and ask permission. He was more than happy to let me trap on his property. He said that during October on numerous occasions he saw a pair of coyotes in the harvested corn field not more than 50 yards from his house. "Those darn coyotes seem to be pretty bold animals," he said as he continued to hammer on the crib. "Hope ye catch 'em, all" he shouted. I thanked him for the permission and offered to help him with the crib. He graciously refused, and I was on my way back to the truck to get my gear.

The coyote has long been heralded by professional Western trappers as being the most difficult furbearer to catch. I found this hard to believe, considering





M. GIRIO BRUMMETT



the likes of some of our local red fox that appeared to have college degrees in fur trapping. Nevertheless, I decided to treat the coyote as an overgrown fox and set the traps accordingly.

I set the first pair of traps where a winter wheat field bordered a small hayfield. Coyote tracks were evident in the loose soil of the wheat field, leaving the impression that this was a regular haunt for the crafty animals. The location seemed to be ideal as the hayfield contained many small piles of loose hay, which provided great cover for mice and other small mammals. The opposite side of the hayfield was bordered by a thick patch of white oak and pines.



I set two traps in this area and then hiked through the woods to check out another field that I could see through the trees. An old tractor trail wound its way through the middle of the field. Knowing a fox's passion for using such trails, I checked to see if the coyotes were also using them. It didn't take long to find a pile of coyote droppings which confirmed my suspicions. I quickly set two more traps before heading back to the truck. I planned to keep those traps set for about four days, pulling them

before the start of muskrat and mink season.

Sunday found me up at the crack of dawn and heading to the coyote area. A quick walk through the fields and a glance through my binoculars indicated that none of the traps had been disturbed. Better luck tomorrow, I thought as I headed back to the truck.

As I began the hour long drive home from work on Monday afternoon, I couldn't help but wonder what the trapline had in store. It was getting dark much earlier now, therefore I drove directly to the farm in order to take advantage of every second of daylight. Before reaching the farm, though, I pulled the truck to a stop along a stretch of deserted country road. It was time for me to change from engineer to coyote trapper. The dress shirt and wing tips were replaced with hunting coveralls and rubber boots. I laughed to myself as I started the truck; I could just imagine what Superman must have felt like when he changed in the phone booth.

**I SET a trap next to the high bank and placed some small sticks around the opening to break the trap's outline. As a finishing touch, I combed some of the long bank grass down around the trap to complete my camouflage job.**

As I arrived at the farm the sun was sinking into the western treeline. I had 20 minutes at best before it would be dark. The first two traps by the wheat field had not been disturbed. As I worked my way towards the tractor path I could see that one of the traps had connected. It was a big female coyote with eerie green eyes that seemed to stare right through me. I quickly dispatched it with my 22 revolver and reset the trap. It was quite a haul back to the truck, lugging the heavy coyote and bucket of gear. I stopped many times to rest and admire its fur. I was one step closer to my goal. Now all that I had left to catch was a slippery mink.

Pennsylvania's mink and muskrat season started on Thanksgiving day, and Thursday morning found me waist deep



in a local stream, setting muskrat traps and looking for the perfect place to catch a mink. I had trapped beaver on this stream during the previous January and noticed one day where a mink had pulled a muskrat onto the ice and devoured it. All that was left was a pile of fur scraps and mink tracks.

Minks are said to generally be bank hunters, entering the water only when forced to by some obstruction on the bank. Blind sets or sets without lure or bait are made in such locations to catch the mink when he enters the water.

As I waded up the middle of the stream I noticed a well used trail in the long grass bordering the stream. Upon further investigation, I followed the trail until it came to a high bank area which would force whatever was using the trail into the water. I knew from tracking minks in the snow that it would hug the high bank until it could once again get out of the water. I felt I had found the perfect location as I pulled a killer trap from my packbasket. Because beaver were in the area, I was using small body-gripping traps.

I set a trap next to the high bank and placed some small sticks around the opening to break the trap's outline. As a finishing touch, I combed some of the long bank grass down around the trap to complete my camouflage job. I set a number of muskrat traps on that stream, along with a couple more mink sets, before trudging back to the truck.

A week passed, and although I caught a number of muskrats, the mink eluded me. By this time buck season was in full swing, and the muskrat catch was beginning to drop off to the point where I considered pulling my traps for another year.

As I waded up the stream, picking up muskrat traps, I couldn't help but wonder what had happened to the mink that were here during last year's beaver season. As I rounded the bend in the stream towards the mink traps I was startled by a loud splash. I looked up in time to see five doe standing in the middle of the stream. The lead doe cautiously approached the far bank, with

## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

her nose pointed upward testing the air. She moved as if she were walking on egg shells. The last doe noticed me standing in the middle of the stream, and with one snort, all five melted into a stand of pines guarding the stream bank. I continued slowly up the stream, hoping to spot a buck that might be sneaking behind them, but the ominous dark clouds prodded me back to my business at hand.

When I approached the high bank set, I could see that the trap was missing. I noticed a dark patch of fur floating just off shore. I quickly grabbed the trap chain, and much to my surprise, I had finally connected; it was a young female mink. I stood there for ten minutes, admiring its silky fur, until the rain drops slapping across the water surface hastened me on my way.

When I look back on 1986 many thoughts come to mind. I remember the many seasons I spent with Dad squirrel hunting in the front woods and hunting pheasants on Minteer's farm. I can still see the first red fox I trapped and the first deer I bagged. Yes, Dad was there on both occasions.

The coyote was made into a rug, and the mink now adorns my TV set. As for the red fox I caught that year, well they are being made into a jacket for my wife. 1986 was indeed a season to remember. This one's for you, Dad.



**ANYONE WHO** spends much time outdoors may develop Lyme disease. In addition to hunters, biologists, hikers, and other outdoor enthusiasts, people residing in wooded suburban areas are susceptible as well.

# Lyme Disease

**By Margaret Clark Brittingham**

**Assistant Professor, Wildlife Resources, Penn State University**

**L**YME DISEASE is a relatively new, tick transmitted disease caused by a bacterial spirochete. The number of Lyme disease cases reported in the United States has been increasing rapidly and has become a national concern. In humans it causes a variety of symptoms including headaches, fever, general malaise, a characteristic red rash, and arthritis. If left untreated, Lyme disease can result in heart damage and damage to the nervous system.

Anyone who spends much time outdoors may develop Lyme disease. In addition to hunters, biologists, hikers, and other outdoor enthusiasts, people residing in wooded suburban areas are susceptible as well. In many cases,

Lyme disease is preventable, and it is treatable when detected in its early stages. As the disease progresses, however, it becomes much more difficult to treat. This article provides information and guidelines to help you know where and when risk of exposure is greatest, methods of preventing exposure, signs of the disease, and what to do if you suspect you have Lyme disease.

## History and Current Distribution

A cluster of more than 50 people in Old Lyme, Connecticut, many of them children, developed a mysterious disease in 1975 that resulted in severe inflammatory arthritis. The cause of the disease and the mode of transmission



were eventually identified, and the disease was named Lyme disease after the town. This disease had previously been reported in Wisconsin in 1970 and in Europe during the early 1900s, but the causative agent was not described until the Connecticut outbreak.

The number of reported cases and the geographic distribution have been increasing. During the period 1975 to 1979, 512 cases were reported from 14 states. In 1984, 1498 cases were reported from 24 states. By 1988, Lyme disease had been reported in 32 states. As with many "new" diseases, the initial burst of cases appears to reflect both an actual increase in the number of cases and an increase in awareness of the disease, resulting in physicians and patients being better able to recognize the symptoms. The spread and increase in number of Lyme disease cases may also result from an increase in the abundance and distribution of the deer tick, *Ixodes dammini*. Deer ticks were rare in the United States until around the 1960s. At that time researchers collecting ticks noted an increase in the number and distribution of the deer tick. By the late 1960s, scattered populations of deer ticks had been identified throughout the northeastern United States, and by the late 1970s, populations were well established in the upper Midwest. They have continued to increase in abundance and distribution. The ticks are spread by migratory birds, but why the increase is occurring is still a mystery. Some people attribute it to an increase in the number of deer (a principal host) in the eastern United States.

Currently, the Center for Disease Control reports an average of 1500 cases per year. Most (86 percent) of the cases are concentrated in three areas: the northeastern and mid-Atlantic states, Minnesota and Wisconsin, and in California and Oregon. As of January 1, 1987, physicians in Pennsylvania must report all cases of Lyme disease to the Pennsylvania Department of Health. They reported 66 cases in Pennsylvania during 1987 and 144 in 1988. Lyme disease has been reported in 32 coun-

ties, but most have been in the southeastern part of the state; 78 cases have been reported in Montgomery County alone.

### The Bacteria and the Tick

Lyme disease is caused by the spirochete bacteria, *Borrelia burgdorferi*, named after Dr. Willy Burgdorfer, who discovered it. The bacteria is present in infected ticks and is passed to new hosts (humans, dogs, other mammals, birds) when the tick attaches to the skin and begins feeding. Once the host is infected, the bacteria may be present in the blood, joints, tissues, and urine. In the northeastern United States, Lyme disease is transmitted almost exclusively by the deer tick, *Ixodes dammini*.

**Identification** The deer tick *Ixodes dammini* is a small brown tick. It occurs in three stages: adult, nymph, and larva. The adult female when fully engorged with a blood meal is approximately the size of a pea and has an orange or yellow abdomen. Larval and nymphal ticks are approximately the size of the period at the end of this sentence. In all stages, the deer tick is much smaller than the more common dog tick, *Dermacentor variabilis*. This size difference is the best characteristic for untrained people to use in distinguishing between the two species of ticks.

**Life Cycle** The deer tick has a complex life cycle that ranges over a two-year period and involves three hosts. In late winter or early spring the adult female lays eggs and then dies. The eggs are deposited near the ground in brushy locations or in tall grass at the edges of wooded areas. The larvae hatch in late summer (July-September) and begin to search for a host. The most common hosts are white-footed mice, but chipmunks, squirrels, and other small mammals, humans, or birds may also serve as hosts. Larvae remain attached to the host for two to four days. The larvae generally are not infected with the bacteria at this time, but they can become infected if they feed upon infected hosts.

In fall the larvae drop off the host and

enter a resting stage. They overwinter without feeding and in spring and early summer moult into nymphs and seek out new hosts. The nymphs commonly attach to white-footed mice and other small mammals, humans, and birds. Previously infected nymphs can transmit the spirochete to their new hosts. This is the stage at which humans commonly become infected. After three to four days, the nymphs fall off and moult into adults.

Adult ticks are found in brushy vegetation approximately three feet off the ground. During fall and early winter, adult ticks attach to any warm-blooded animal host. White-tailed deer are the most common ones, probably because of both their size and their abundance in areas where ticks are common. Ticks attach to a host when it brushes up against them. The female ticks feed on the host, lay eggs, and the cycle begins again. Because the ticks are usually three feet off the ground, smaller animals are less likely to serve as hosts. Some less common hosts include foxes, raccoons, dogs, and occasionally people.

### The Disease

Knowing when and where Lyme disease is most likely to occur and how to recognize and treat it will reduce the risk of infection.

Most Lyme disease cases occur between March and October, months when ticks are active in the northern states. Peak numbers of cases are reported in June, July, and August. This

peak coincides with the period when the nymphs are attaching to hosts and when people are spending the most time outdoors. Although humans can be infected from any stage, they are most frequently infected by the nymphal stage.

**Symptoms** Initial symptoms occur within three to 30 days of being bitten by an infected tick. Primary symptoms include a red rash, *Erythema chronicum migrans*, that develops at the site of the bite. The rash is often circular and grows larger during a number of weeks. It may reach 18 inches in diameter. Although the characteristic rash at the site of the bite is diagnostic of Lyme disease, as many as 50 percent of infected individuals never develop the rash. Infected individuals may also experience flu-like symptoms such as headaches, fever, aching muscles and joints, fatigue and swollen glands. These symptoms in themselves are characteristic of a number of diseases, but occurring in conjunction with a bite from a deer tick would suggest Lyme disease and warrant a call to a physician. Lyme disease responds quickly to treatment at this stage.

If Lyme disease is left untreated, the rash and primary symptoms will gradually disappear, but weeks or months later an infected individual will experience secondary symptoms. These may include migraine-like headaches and arthritis in the knees, hips, shoulders, and other joints. Heart symptoms may also occur and include dizziness, weakness, and an irregular heartbeat. Nervous system problems including loss of memory and difficulty in concentrating may also arise. At this stage, Lyme disease may be confused with rheumatoid arthritis and a number of other diseases. Lyme disease is more difficult to treat at this stage.

If left untreated, additional symptoms may develop months or even years



**THE MOST common hosts for deer tick larvae are white-footed mice, but chipmunks, squirrels, and other small mammals, humans, and birds may also serve as hosts. Larvae remained attached to the host for two to four days.**



later. Severe arthritis sets in, often causing permanent damage to the joints and leaving an individual crippled. Cardiac and nervous system complications also arise. At this stage, the disease is much more difficult to treat.

**Diagnosis** Diagnosis of Lyme disease is based primarily on clinical findings and history of exposure to the deer tick. A tick bite in conjunction with the characteristic red rash is diagnostic of Lyme disease, but many individuals will not show this symptom. Diagnosis of Lyme disease in later stages is often very difficult because the patient may not remember the previous exposure to the tick, and the symptoms of the disease mimic those from many other diseases. A correct and timely diagnosis depends in a large part on the patient informing the physician of any known or potential exposure to deer ticks.

Blood tests to detect increased levels of antibodies to the spirochete bacteria are available. The serological tests most commonly used are the immunofluorescence assay (IFA) and the enzyme-linked immunosorbent assay (ELISA). These tests are able to detect increased antibody levels in the later stages of Lyme disease; however, in the early stages of the disease false negatives (negative test result when actually infected) occur 60 percent of the time. Because of this, most diagnoses are based on symptoms of the patient and history of exposure to the tick.

**Precautions during Pregnancy** Pregnant women infected with Lyme disease may pass the disease on to their unborn children. The bacterial spirochete can cross the placenta and be transmitted to the developing fetus. Studies are currently being conducted to determine what effects this has on both the outcome of the pregnancy and the development of the child. Although the data are inconclusive at this time,

preliminary results suggest that women infected with Lyme disease during pregnancy are more likely to miscarry, have a still birth, or have a child with developmental disabilities. If possible, pregnant women should avoid tick infested areas, and if bitten by a deer tick should contact their physician immediately and begin treatment with antibiotics.

**Precautions for Hunters** There is some concern, particularly among hunters and other individuals who handle animals, that the bacteria causing Lyme disease can be transmitted to them if blood or other body fluids of an infected animal came in contact with an open cut or wound. Because the bacteria is present in blood and body fluids, this is definitely a possibility. Although no known cases have been transmitted in this manner, anyone who has open cuts or sores on their hands should wear plastic gloves when handling a potentially infected animal.

**Treatment** Because Lyme disease is caused by a bacteria, it is treatable with antibiotics. Antibiotics normally pre-



**DURING FALL and early winter, adult ticks attach to any warm-blooded animal host. White-tailed deer are the most common ones, probably because of both their size and abundance in areas where ticks are common.**

This article is adapted from "Lyme Disease," Penn State Cooperative Extension Circular 366, available from your county extension agent, or by writing: School of Forest Resources, Pennsylvania State University, University Park, PA 16802.

scribed include penicillin, tetracycline, and erythromycin. The sooner Lyme disease is detected the easier it is to treat. Difficulties often arise during the later stages of the disease.

**Prevention** The best way to avoid Lyme disease is to avoid the fields and woods where deer ticks and their hosts reside; however, this is not a suitable solution for many people. The following precautions will reduce risks of infection when outdoors in tick habitat:

- Wear long pants, a long sleeved shirt, a hat, socks and closed shoes.
- Tie the bottoms of pant legs or pull socks up over pant legs.
- Wear light colored clothing to help in detection of ticks.
- Spray clothing with a commercial insect/tick repellent.
- Put tick repellent collars on pets.

After returning from walking in woods or grassy areas where deer ticks are present:

- Remove and wash clothing immediately.
- Shower and inspect your body for ticks.
- Inspect pets and children for ticks.

A repellent and insecticide called permanone is available for use against deer ticks. This product is sprayed on clothing and repels and kills ticks, chiggers, and mosquitos. Permanone does not harm clothing, but it should not come into direct contact with skin.

### Removal of a Tick

If you find a tick, carefully remove it by placing tweezers close to the head

of the tick and pulling. Make sure all mouthparts are removed. Wash and disinfect the bite area. Do not squeeze or crush the tick to kill it; if it is infected this will release the bacteria. Instead, place the tick in a jar filled with alcohol or flush it down the toilet. Home remedies such as Vaseline, matches, alcohol, and fingernail polish usually do not remove the tick.

If you suspect you were bitten by a deer tick or are unsure of the identity of the tick, save it in alcohol. This will be helpful in diagnosing Lyme disease if you develop symptoms of the disease later on.

### Pets and Livestock

Besides people, cats, dogs, horses, and cattle show clinical signs of Lyme disease. These animals do not develop the characteristic red rash. Instead, the most common symptoms include intermittent lameness, lethargy, fever, swollen glands, and loss of appetite. As with people, the number of cases of Lyme disease reported in domestic animals is increasing, and the majority of cases are concentrated along the northeastern seaboard and in the upper Midwest.

**Cats and Dogs** The signs, symptoms, and treatment of Lyme disease are similar in cats and dogs.

Symptoms exhibited by both include fever, anorexia, lethargy, depression, and sudden onset of arthritis. Arthritis occurs primarily in the wrist joints, but toes, shoulders, and elbows can also be infected. Affected joints are usually painful, red, and swollen. If left untreated, the arthritis may disappear and then return at intermittent intervals with the potential of crippling the animal. Symptoms of Lyme disease may appear any time from a few days to over a year from the time the individual was infected. Time of onset depends on the level of spirochetes in the blood. This in turn depends on the number of infected ticks that bit the animal, the length of time they were attached, and the immunologic status of the animal.

Lyme disease is difficult to diagnose in cats and dogs. Diagnosis is generally



based on a history of exposure to deer ticks and sudden onset of arthritis with no other detectable cause such as trauma to the joint. Because Lyme disease has often progressed to an advanced stage by the time it is detected, it is very difficult to treat. Penicillin, tetracycline, and erythromycin are the typical antibiotics administered. This treatment appears to provide some short term relief, but many owners find their pets continue to experience intermittent lameness.

Dogs that frequent tick infested places often develop Lyme disease. Brushy, dense areas on the edges of woods are ideal for both deer ticks and many game birds, so bird dogs often become infected. Lyme disease can also be transmitted directly from dog to dog in the absence of ticks; possibly through contact with urine from infected dogs. In order to reduce exposure, dogs should be inspected on a daily basis when they are outdoors and all ticks should be removed. When removing a tick, follow the precautions described earlier under "removal of a tick." The longer the tick is on the dog, the more likely the dog will become infected. Collars that repel ticks should also reduce exposure. In areas where tick populations are extremely high, dogs often have more than 50 ticks on them after a day in the field. In that situation, it is best to have a veterinarian dip the dog in an insecticide-acaricide bath that will kill the ticks directly.

**Cattle and Horses** Both cattle and horses may become infected with Lyme disease. In cattle, Lyme disease can be transmitted directly from cow to cow through infected urine, and pregnant cows may pass the bacteria directly to their unborn calves. In dairy herds where animals are in close contact, entire herds are often infected. The clinical signs of Lyme disease in cattle and horses include fever, lameness, and arthritis. Diagnosis is based primarily on clinical signs, history of exposure to the deer tick, or membership in a herd with infected animals. The disease is treated primarily with penicillin.



### Future Controls for Lyme Disease

No effective methods of controlling Lyme disease are currently available. Attempts at control have focused on two of the tick's most common hosts, the white-footed mouse and the white-tailed deer. In the first case, pieces of cotton soaked with insecticide are placed near mouse burrows. The mice pick up the cotton and incorporate them into their nests. Ticks attached to the mice die when they come into contact with the nest. This method works on an experimental basis and in small areas, but would not be efficient over a large area.

The second attempt at control involves removing or reducing the number of white-tailed deer in areas where Lyme disease is a problem. Experimentally, this approach has worked in limited areas, for short time periods, but it is probably not a solution for larger areas and longer periods of time. For a variety of reasons, it is extremely difficult to completely eliminate deer from an area. When deer numbers are merely reduced, the number of ticks per deer often increases. In addition, because deer ticks are not host specific, any warm-blooded animal can serve as a host. When deer are removed from an area, the ticks attach to other mammals. For the immediate future, taking preventative measures and being aware of the signs and symptoms of Lyme disease continue to be the best ways of reducing the risk of contracting Lyme disease.





BOB  
SUPCHICK



# Pennsylvania's Greatest Bear Hunter

By John Tomikel

**F**OR MY MONEY, the best bear hunter and trapper in Pennsylvania history is E. N. Woodcock. I must confess, however, Woodcock did his hunting and trapping when game laws were much more lenient than today. For one thing, bears could be hunted year round. Yet Woodcock had a hand in making the state's game laws stricter.

E. N. Woodcock was born at Lymanville, Potter County, on August 30, 1844. He killed his first bear when he was 13 and his last bear at age 63, an even 50 years of pursuing bear. In that 50 year span Woodcock took over 400 bear.

Most of what we know about Woodcock appeared as memoirs in the old *Hunter-Trader-Trapper* magazine, from 1903 to 1913. A. R. Harding, editor and owner of the magazine, maintains that Woodcock never illegally killed a bear nor trapped unprime fur.

## Favorite Counties

Woodcock supported himself entirely by hunting and trapping. His favorite counties were Clinton, McKean, Cameron and Potter. In his journals he named other woodsmen who also made their livings by hunting and trapping bear during the 1870s. He wrote that these men could be counted on the fingers of one hand—Leroy Lyman, Horatio Nelson, Lanson Stephan, Isaac Pollard, and Ezery Prichard, names still familiar in those counties.

Woodcock would go into the woods in October, set up camp and hunt bears until the animals began denning in December. He also set traps for smaller furbearers and occasionally shot deer.

One of the first hunts Woodcock describes took place during the fall of 1865. He and his partners, Charley and Will, set up camp along Kinzua Creek. The trio were after deer. The Civil War

was winding down, and venison was commanding high prices in New York and other northern cities.

During that five-week outing Charley got 16 deer, Will shot 15, and Woodcock killed 12. But Woodcock also got two bear, two otter, 13 marten, eight mink, and five raccoon. He wrote that the fur brought him a little over \$100, and he got \$35 for each of the bear.

When he was serious about taking bear Woodcock used three trapping methods—steel foot traps, large pen or box traps, and deadfalls. The steel foot trap was chained to a drag log and the hunter-trapper would trail the track. His pen traps were designed along the lines of today's culvert traps. The deadfalls employed huge tree trunks and would take an entire day to construct.

Bear trapping was conducted within a five-mile radius of camp. Woodcock used Newhouse traps until he had a blacksmith make some of his own design. The Newhouse trap had straight spring bars which made it difficult to carry over the arm and shoulder. The Woodcock design featured curved steel which could be carried comfortably on the shoulder and still allow free use of the arms. Woodcock baited his traps with sheep or calf heads.

Woodcock often used a litter or "drag rack" to get his cargo out of the woods or to a logging road where it could be reached with a team. After he had obtained a good load of bear and venison he would walk to a large town, usually Emporium or Kane, and hire a team and wagon to come and pick up his harvest.

Following the drag marks of a bear that had broken the chain but still had the trap was not easy. One bear dragged chain and trap an estimated eight to ten miles into the "deep woods." He trailed another for seven days, only to find that

another hunter had already killed the animal and refused to return the trap.

A Mr. John Howard joined Woodcock for a Cameron County hunt in the fall of 1876. They got four bear and six deer. Woodcock wrote in his journal, "Deer were as plentiful as rabbits." Mr. Howard apparently was a gentleman who employed Woodcock as a guide. Howard got his money's worth, although Woodcock describes a miss, "I saw Mr. Howard standing with head down and bearing the expression of a motherless colt."

Bear trapping peaked around 1900, when Woodcock tells us more than 100 bear were caught. The newest technique at the time was to use dogs and Woodcock objected. Dogs treed the bear and the hunter merely followed the sound and shot "poor old bruin" out of the tree. Trappers also turned their dogs loose on trapped bear.

### We Must Submit

Woodcock writes, "The gentleman sportsman and his dog has ordered you and I, and all other trappers of Pennsylvania for that matter, to cast our traps on to the scrap pile and we must submit." Using dogs to pursue bear became illegal in 1935.

Once when trapping on the East Fork of the Sinnemahoning River, Woodcock caught two bear in traps. He found one bear with the chained drag caught in the fork of a tree. By nightfall he still had not found the other bear. The next day Woodcock went in search of it. He did find the bear, but he had forgotten to take his rifle with him.

He had a small revolver and a trapping hatchet. He worked his way up to the bear as close as he dared and waited for his chance to get a clear shot. He fired at the head and missed. He fired two remaining cartridges just back of the animal's shoulders. The bear paid as much attention to these shots as if it "had been a flea that bit him."

Woodcock took out his hatchet, grabbed a club, and attacked the bear. He finally concluded a retreat would be best. The next day, with the help of Mr. Stephens, the bear was found, but it was near death as the bullets had penetrated its lungs.

Later in life Woodcock circulated petitions to get closed hunting and trapping seasons. "Now comrades, on the fourth of July 1910, the primaries to nominate candidates to represent the people of the commonwealth of Pennsylvania, will be held. Let every trapper of the state who is interested in the matter of a closed season on our fur bearing animals get out and talk with their candidates whom they wish to represent them at the next assembly. Let him know that you wish a law passed. We should bear in mind that writing and talking without action will not do. We must act."

Many a time Woodcock found himself in the forest a long way from camp, with snow falling, and no way to get back by nightfall. He would find a large fallen log close to the ground and scrape away the snow in front of and around the log. Then he would build a fire on the ground near the log. After it had burned down he pushed the coals against the log and added wood to build a more secure campfire. If he had venison with him he cooked a nighttime snack. Then he placed hemlock boughs on the ground where the fire had been. He would lie on the boughs and cover himself with his coat. He advised to never wear your coat to bed but cover yourself with it. Under these conditions he was able to sleep for six or seven hours. Sometimes he covered himself with the hide of a freshly skinned bear.

Woodcock wrote, "For doing these things my friends would scold me, but the reader will know, if he has the blood of a hunter in him, that I enjoyed it." Right on.







**"ANOTHER THING that would bring me a great deal of pleasure would be to follow Don Lewis on a chuck hunt. I've read and reread his GAME NEWS columns so often it's as though I've hunted with him many times."**

## **Chuck Hunting with Don Lewis**

**By Carl W. McCardell**

**A**UTUMN'S spectacular array of colors grabbed my attention while I traveled across Pennsylvania's Northern Tier. In many valleys the trees were already at their peak, their beauty often stealing my thoughts away from the significance of my trip.

The archery hunters were out in full force, seeking an opportunity to bring back some early venison. As much as I would liked to have been included in their numbers, I was on another mission.

Only a year before, in a conversation with a friend, I had expressed a hunter's wish. We all have probably often expressed a desire to hunt out West or in a Canadian Province, and my thoughts

were similar. But I've also had a desire to hunt with some noted writers.

"One of these days I'd love to accompany Jim Bashline on a pheasant hunt," I told my skeptical listener. "I'd also give a lot of ammo to sit in a duck blind with Gene Hill and be able to listen to his tall tales."

"Another thing that would bring me a great deal of pleasure would be to follow Don Lewis on a chuck hunt. I've read and reread his GAME NEWS columns so often, it's as though I have hunted with him many times."

Little did I realize one of those three desires would come true during the following year.

Recently becoming a member of the

Pennsylvania Outdoor Writer's Association (POWA) brought about an opportunity to meet Don Lewis and his wife Helen. Shortly after POWA's 1988 spring meeting in Williamsport, I bravely contacted Mr. Lewis.

To my surprise and delight he agreed to both an interview and an accompanying woodchuck hunt. The only factor involved would be finding time in which to take our hunt. His schedule, as you might imagine, is a busy one.

Although recently retired from his regular line of work, Don was in the process of writing his first book. Even for a writer of his stature, it takes a great deal of time and effort to author a 200,000-word volume. Added to that task were other prior commitments, so getting together wasn't easy.

The summer had come and gone before we knew it. I had stayed in contact with the Lewis household by telephone, and Don was always willing to take a break from his typing and share advice on a wide range of subjects during our chats.

"I know it's not the best time to hunt groundhogs," he said one day, "but let's give it a try October 1. I want to check out a new spot in the Port Allegany area."



When I arrived in the small McKean County town I had to wait only 15 minutes for Don and Helen. We chatted until our host, Lincoln Longstaff, caught up with us.

Longstaff has a nice place several miles out of town. He sights in a number of the local farmers' deer rifles at his shop and range every season. In return, he has access to many properties on which he and his friends can hunt.

The afternoon was unseasonably warm. After eating a late lunch we set out to scout an area where Don and Helen planned to do some serious woodchuck hunting the following summer.

I was entertained by the stories from these expert varmint hunters while we ate and as we walked the fields. Longstaff and Helen walked on ahead to locate a likely target. Don and I found a shady spot where we just talked. This conversation I now share with his permission.

"Where are you from originally?" I asked.

"I was born in Apollo, Pennsylvania in 1921, and soon after, we moved to a small town by the name of Frenchs Corners."

When did you start to hunt?

"1922. No, actually I went with my brothers, in what they call dogging, probably when I was seven. I had BB guns when I was from eight to ten years old, and I then graduated to supervised 22 shooting. In other words, I always had someone with me when we shot rats around the barn. When I was older and had a hunting license I was allowed to hunt woodchucks and red squirrels."

When did you start to write?"

"Well, writing came later. My mother wrote poetry and a lot of religious material for church magazines. My father wrote for several game chicken magazines. We were all great readers. Our

**DON LEWIS has been writing for Pennsylvania's GAME NEWS since September, 1964. His familiar gun column, "The Shooter's Corner," officially began in February, 1965.**



library contained over 6000 books. Many evenings the family gathered around the old oil light, ate doughnuts, drank buttermilk; even the neighbor kids came over to listen to my mother read."

Writing came naturally?

"Yes, I guess so."

How large was your family?

"I had three brothers and a sister. All the boys were hunters. My brother Dan was a major influence on my life. In fact, I'm dedicating my book to him."

When did you meet Helen?

"In 1940, while fishing — and I haven't fished since! No, I'm only kidding. Our first outing we fished along the Allegheny River. Then we hunted woodchucks along the hillsides."

When were you married?

"In 1942. I was in the service then. We had a military wedding — It took five MPs to take me to the altar!"

Do you really want me to say that?

"You better check with Helen on that one."

How long were you in the service?

"Exactly 42 months. By the way, I hunted in Germany after the Germans surrendered. We helped feed the displaced people who had lost their homes. We'd get 15 to 20 deer on a weekend, then give them to the mess hall. I had the most inaccurate M1 in the military, though, and I figured it cost about \$7 in ammo for every deer I got."

What did you do when you got out of the service?

"I started out in clerical work first. Then I was cost accountant for the Allegheny River Mining Company. After that I went to work for the Ringgold Corporation. I was with them for 35 years, most of the time as their credit manager."

When you started to hunt again after the war did Helen go with you?

Oh yes. As a matter of fact, the first gift I gave her was a Remington 511 Squirrel Master Rifle in 22-caliber."

When did you start your gun shop and range?

"Right after I got out of the service. A friend of mine and I started to reload

ammunition together. Later, in 1956, I had a combination gun shop and reloading shop. I then moved to our present home in 1961. I built another shop there, but I lost it when the state came through with a road. Later, in 1964, I built a shop over a garage and that's where I do my work today."

What are you trying to accomplish in your columns and articles?

"I try to write in such a way as to give the reader factual and useful information in an easy to understand manner."

### So Knowledgeable

How did you become so knowledgeable about firearms?

"From associating with other people. I worked on guns all the time. I was a gunsmith up until nine years ago. I might mention, that knowledge is worthless unless it is passed on. What good would it do, for example, if a man studied to be a barber and then never cut a head of hair? When I can make someone's life richer from what I know, and give it willingly and generously, then that day has been worthwhile to me."

Do you have anything else you would like to say about your writing?

"The size of the remuneration has nothing to do with the quality of my work. In fact, if I get \$75 or \$750 for a

**The rolling hills of relatively unpopulated McKean County offer plenty of opportunities for long range woodchuck hunting enthusiasts to practice their sport.**





**ALTHOUGH** their shooting opportunities were limited, the author and Don, along with Helen and Lincoln Longstaff, had a most enjoyable day in the chuck pastures.

piece, I still give the same quality to each editor. The article might not be as long or as comprehensive, but what I write will be the same quality."

Have you gotten many comments over the years?

"The best comments I have received have been something like; 'When I read your article I felt like you were talking directly to me.' That's what I am trying to do. I want the reader to go with me."

Would you like to comment on your upcoming book?

### **200,000 Words**

"I've worked 17 months on the book. It should be around 200,000 words. The book, by the way, is not just a collection of my columns. It has been written from word one. It deals with various subjects and aspects of shooting. I have written it the way I talk. I hope it is, once again, factual, informative and easy to read."

What else have you done in the outdoor realm besides writing?

"I did a little radio and television over the years. Only on a minor scale,

though. I've conducted a lot of gun seminars to supplement my income, and I'm still putting those on."

Don Lewis has been writing for Pennsylvania's GAME NEWS since September 1964. His familiar gun column officially began in February, 1965.

He was notified of his acceptance to the GAME NEWS staff by then editor George Harrison. The happy announcement, however, came on the heels of a family tragedy. Around that time, both Don's father and brother Fred died, only 20 days apart.

The author was able to pull himself together, though, and start into the work that lay ahead. He told me of his faith in the Lord and how this has enabled both him and Helen to face such events in their lives.

In addition to their work together on outdoor projects they also are advisors to a board of directors of Transylvania Bible College.

Don credits Helen for the dedication she has had to being a good housewife



and mother to their three children. He spoke highly of each one in the family. Daryl, Tim and Carol are obviously loved equally as he told me of their various achievements.

With nearly 25 years spent writing for GAME NEWS, Don has penned close to 300 columns. In addition, Don Lewis has written numerous articles for *Gun Digest*, *Shooters Bible*, *Petersen's Hunting*, *Pennsylvania Woods and Waters* and others. His name has also graced between 1500 and 2000 newspaper columns.

A member of POWA since 1965, Don was its president for two years. He is also a member of the Outdoor Writers Association of America, which has given him an opportunity to meet and talk with many nationally known outdoor communicators.

I personally found Don to be a warm and friendly man who is sincere about everything he does. I believe GAME NEWS is truly blessed to have him as one of their own.

Although it does not very often show in his writing, he is a very witty and funny individual. Some of his humor came out in the interview and again when I needed it most—during our hunt. . . .

After our interview ended we joined Helen and Lincoln. They had not had much success in finding us a target.

We had brought only one rifle along, Helen's custom M77 Ruger 22-250 in a SIX fiberglass thumbhole stock. It was topped with a Redfield 3-9x Widefield Low Profile scope.

Not more than 20 minutes passed when I called attention to a sharp-shinned hawk sitting on a fence post better than 200 yards away. We were all watching the small bird of prey through binoculars when a chuck suddenly popped up.

The varmint was munching on clover and had gone unnoticed because of our concentration on the hawk.

"Now I'm going to see how it's done," I said to Don.

"No, you're going to take the shot," he said.

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"Oh, I can't. I came here to watch you shoot," I protested.

Hunching down behind the rifle I felt a certain uneasiness. At least Helen Lewis was not there to make me any more nervous. She had just walked back to our trucks. Only two sets of expert eyes were focused on the unaltered chuck.

Carefully, I loaded the unfamiliar rifle. "Put the cross hairs on his neck when he stands again, Carl," I heard a reassuring voice say.

When the hungry creature did just that, I let one fly. The chuck immediately went down. Breathing a sigh of relief, I could not believe my ears when I heard two voices say, "There he is again!"

I gulped hard. "What?" I said.

### Another Round

"Here's another round, Carl," Don quietly whispered.

"Oh, no, you take the shot," I pleaded.

Not another word was spoken. Longstaff and Lewis firmly held their binoculars, searching the field for the chuck. Whoom! The varmint rifle reported for a second time, and again the chuck dropped. "I didn't hear a thunk, did you?" I heard one of my companions say.

After making a thorough search of the battle zone, I slowly trudged back to my two new hunting friends. Hardly looking in my direction, Longstaff said, "One thing I've learned over the years is not to use anyone else's rifle."

"Yeah," I said as I slumped behind the rifle once again, trying to relive the last shot.

With all the compassion he could muster, Don, sensing my embarrassment, said, "Carl, don't be upset, I know how you feel. I missed 'em before, just like that. I think the last time was in 1958!"



**EVERY TRAPPER** controls his destiny. It's up to you to find and trap the critters, determine how much time, effort and equipment you'll invest in, and then it's up to you to make it work. You're the key.

## What Do You Expect?

By Joe Kosack

**WHAT DO YOU** expect from trapping?

The average trapper would probably say a fur shed stacked to the rafters with pelts. Another might say enough territory to roll through for an entire season of trapping. A part-timer might add, a way to take big numbers with minimal effort.

Some people may think that those trappers are asking for too much. However, they're not. Each of those desires can be satisfied with a positive attitude, a willingness to work, and an understanding of the furbearers you intend to trap. Weather, of course, must cooperate.

To a degree, every trapper controls his destiny. It's up to you to find and trap the critters. It's up to you to determine how much time, effort and equipment you'll invest in your traplines. Then it's up to you to make it work. Yes, you are the key

to unlocking trapline success; don't let anyone tell you differently.

Most trappers who fail know why they did, if they're honest with themselves. Sure, sometimes it's a lack of experience that dooms many a trapline from the outset, but many times the trapper plainly just didn't give the sport his all or he skimped in some facet of the operation to save time, money or effort. Now don't get me wrong, it's okay to save time, money and effort, providing it's not affecting your yield. But when a trapline is sour in a critter-packed area, you have to realize that you need to spend more time there to make it work.

Plenty of good territory is the foundation of any successful trapping venture. Skimp on this and your season will sputter long before you're ready to pull the traps. Still, if you think about it for a moment, it's easy to determine why this is so: You must have new areas to



bounce into when the furbearers start to get thin in the territory you're trapping. If you don't, you're wasting your time or over-trapping the area.

To find good territory a trapper has to hunt for it. Sometimes this requires long tours in the country, door-to-door campaigns to secure permission to trap on farms, or study of topographic maps. Other times, it's as easy as peeking at culvert entrances, talking to Uncle Ed about his sweet corn damage, or scouting the creek while trout fishing. However, one aspect of this preseason work never changes; it won't get done if you don't do it.

Regardless of how you look at it, scouting is a bittersweet affair that takes time and effort, not to mention money for transportation. Sometimes you will bomb in your probes for trapping paradises, other times you will score. If you want to reinforce your commitment to a "furtastic" season, though, stay at it until you find and secure permission to trap on enough land to last for two seasons. Then trap what you can.

Extra snooping goes a long way toward improving your take when you're prospecting for fur in new territory. While you're looking for the usual trap-setting locations—culverts, feeder stream junctions, logging trails, old hollow trees, fence rows—try to find some of those dynamite locations that don't usually attract every trapper in the county. For instance, take a look at the underside of that dilapidated bridge. Slide down into that deep, two-foot wide drainage ditch and study its clay bottom to see what's been passing through. Climb up that dirt mound or slag bank to see if critters are partial to its view. Remember, these hard-to-reach, critter-active locations usually offer a lifetime of competition-free trapping because other furtakers just won't take the time or make the effort to find

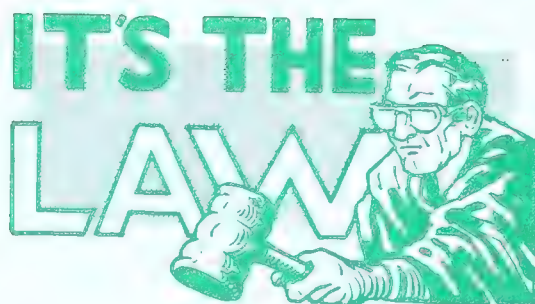
them. In brief, it behooves every trapper to find several of these aces-in-the-hole because they represent a trapline foundation that can be tapped year after year.

As you work at finding ground, you also can start picking up all of the odds and ends that contribute to good fortune. Get good reliable equipment, not cheap stuff that will invite trouble or hinder a speedy, efficient effort. Make sure your truck, car or bike is running smooth. Be certain you have plenty of bait. In short, be prepared—or be ready to endure the consequences.

After you have amassed your kingdom and equipment, it's time to consider strategy. Do you expect competition in certain areas? Are some lands accessible only at specific times during the season? Do feral dogs or pesky rodents present a problem with keeping sets operational for the targeted furbearers in some areas? These are all items of concern for a trapper determined to have a great season, so give them some thought because the answers to these questions could represent the difference between scoring big and doing poorly.



**WHILE you're looking for the usual trap-setting locations—culverts, feeder stream junctions—try to find some of those dynamite locations that don't usually attract every trapper in the county.**



### Question

I am a Landowner who farms for a living and I lease farm land a few miles from my farm. May I hunt on this land without a Resident Hunting License?

### Answer

Yes. Provided the land is within 10 air miles of your farm. You may also hunt on land connected directly to it with written permission of the landowner.

Most traplines follow one of two strategies, or a little of both. These are stop-and-go trapping and saturation trapping. In stop-and-go trapping, traps are placed along chief travelways or at furbearer hunting or feeding locations in a way that permits the trapper to get in and out in a hurry. For example, let's say you're going to trap raccoons along a half mile stretch of creek that really looks promising. The only problem is you don't have time to walk the whole stretch every morning before work because you have traps that must be checked in other areas.

### Simple Strategy

Most good trappers would load up each end of this stretch with bait and trail sets, both on land and in the water. By doing so, they maximize effort at two locations to take the raccoons working the stretch. The strategy is simple: The coons entering or leaving this section will eventually find the sets and be taken. Such an effort, however, may take more time than a trapper's competition will allow.

If you expect other trappers to hit the same section, you may want to consider saturation trapping the entire stretch

and cutting back your efforts in other areas until you're completed. Instead of placing six sets at each end, you could string 24 throughout the half mile stretch. In this type of effort you might load every raccoon trail with two blind sets and a baiter. On land, you would punch out dirtholes; along the streams, pocket sets.

Most trappers saturation trap for two reasons: To take critters from the area in a hurry, so they can trap somewhere else, and to get an upper hand on the competition. However, remember that saturation trapping success is strictly related to critter movements. If the furbearers don't come into the area in large numbers while your traps are set, your take will be no better than if you set the area in stop-and-go fashion. Moreover, you'll have wasted traps in the saturation effort that could have produced fur somewhere else. In brief, a bigger trapline in a certain area is not always better.

As you may have ascertained, strategy is important if you plan to be successful on your trapline, but so are your reactions to the unforeseen problems that plague all trappers every season. Heavy rains, snow and trap thieves frequently chase home a good number of trappers every year, and in order to overcome such obstacles you have to make sound decisions on the trapline and remain flexible. If trap thieves hit you, stake-out the trapline or pull out. If flooding waters cover your sets, make them higher on the bank. In addition, it sometimes helps to remind yourself that you are not the only trapper who works in an ever-changing field.

Your ability to maintain that opening day enthusiasm is a factor that will determine your worth as a trapper as the season progresses. Good trappers charge out of the house to check their traps every day. They work their traplines in the rain and snow, set traps or scout for critters whenever possible, and rise to check traps every day because they believe there's fur in them.

Without a positive attitude, a trapper soon develops problems getting up early and he convinces himself that he's wast-



**A TRAPPER'S optimism should remain high until he has checked his last set, and every difficulty encountered should be greeted as a lesson in self improvement. Overall, trapline production is strictly dependent on effort and planning.**

ing his time. As his enthusiasm continues to wane, the trapper begins to check his traps quickly, often neglecting to check if there's any bait at the sets. Eventually, the trapper may not even check to make sure the traps are still set. Each of these actions spells trouble from a production standpoint and all inevitably lead to a smaller than hoped for harvest. The sooner you realize this and learn to keep yourself entertained afield, the better you will understand what productive trapping requires.

It's easy for a trapper to find reasons to pull his traps. The weather won't cooperate. Rats and mice are stealing your bait before the targeted furbearers arrive at the sets. Problems at home or at work. Still, if you plan to trap—or do anything else in life—successfully, you have to learn to combat or tolerate the spirit dampeners that make quitting seem justifiable. Remember, when you run a trapline, the effort should command your undivided attention because when your concentration is cloudy so are your results.

When a trapper closes the door of his truck and heads out on the trapline, he should leave the world and its problems behind. His optimism should remain high until he reaches the last set and every difficulty encountered should be greeted as a lesson in self improvement. Yes, all trappers have critters pull out of traps, and they also have cold spells when they catch very little. Still, there are reasons for such happenings and a



good trapper will always try to figure out what went wrong. Sometimes the answer will unfold in a day or two, other times it will take weeks, but comprehension is the key to figuring out furbearer movements and preferences, and ultimately, how to run a successful trapline. Good trappers know this, because that's the way they operate.

Overall, trapline production is strictly dependent on your efforts and planning. When you plan properly and always carry your packbasket upstairs, you will surely improve your take. But if you offer only a portion of your concentration and effort to your trapline, it will offer only a like return. Yes, constant commitment is a big order to fill nowadays, but it represents the difference between average and expert in this sport.

## Thoughts While Walking

*How many times it thundered before Franklin took the hint! How many apples fell on Newton's head before he took the hint! Nature is always hinting at us. It hints over and over again. And suddenly we take the hint.*

—Robert Frost



**EACH YEAR, from the last spring frost to the first one in fall, in the surrounding fields and gardens our bees had flowers galore to pollinate.**

## **A Memory of Bees**

**By Carsten Ahrens**

**A**NCIENT MAN domesticated the dog but he “kept” bees. Honeybees cannot be considered even semidomesticated, as one might say of guinea fowl. To bees, man is just another non-bee animal, probably an enemy. But man loves sweets, and long before he developed sugarcane and beets, he discovered the honeycomb (they’re mentioned often in the Old Testament). The stings of angry bees were readily risked to bring a chunk of honeycomb to the delight of family and friends. In time, he discovered bees would live near him if he provided shelter, if he didn’t interfere too much with their ways of doing things, and if he accepted that bees were ruled entirely by instincts, not reason.

A hive may house as many as 50,000 individual bees—a little more than nine

pounds, according to Baeumus, a 19th century entomologist who found there are 5375 bees in a pound. The hive will have one active queen who mates but once to lay thousands of fertilized eggs that develop into incomplete females, the workers. They are the ones that carry on the work of the colony. The larvae of a few of these eggs will be fed royal jelly, a special food made in the heads of young bees. They will become future queens. The queen will also lay a few unfertilized eggs from which will come male bees, the drones. The strongest will mate in the air (the nuptial flight) with some future queen. It’s an odd situation: a drone has a grandfather, half sisters and a mother, but no father! The drone has no stinger; the worker has a barbed stinger which, if used, will result in her death; the queen



**OUR NEIGHBORS** often complained about dragonflies, kingbirds, and other animals that ate their bees, and of those that ate their honey, but I don't remember us ever being bothered.

has a barbless stinger that's used only to kill other queens.

When Columbus came to America, if he had honey on his pancakes, it had to have been packed back in Europe with the other provisions for the trip. Neither Americas had honeybees before Christopher. Our early settlers brought the honey-makers, along with herbs and flower and vegetable seeds, to remind them of their homes in Europe. Of course, when swarming time came, the old queen and part of the colony left the braided straw "skep," as the old-fashioned hive was called, took to the woods and started a new colony.

When I was a boy it was considered an achievement to discover a bee tree. In my case it wasn't skill; the tree was the center of my forest playground. The wild colony was in a storm-wrecked shagbark hickory. A lightning-caused crack ran down to the roots, and at shoulder level there was an opening wide enough to admit bees. A steady stream of the insects was coming and going through the crevice. That evening, with dad's help, a saw, and a smoke-producing apparatus, a friend removed hundreds of bees, their queen, and over a bushel of several kinds of combs. The colony is still going strong after three score years and ten.

Through the centuries, beekeeping remained a cottage industry because there was no easy way to get honeycombs from the bees, to get the honey from the combs, and then to get an unadulterated product to market. Every once in a while in history an invention comes along, like the cotton gin or the threshing machine, that shakes up an old industry. This didn't happen for beekeepers until 1865, when a German, Major D. Hruschka, invented a honey extractor, which used centrifugal force. L. L. Langstroth, inventor of a modern hive with movable frames, was one of several who improved upon the major's



extractor. Before this machine, the method of getting honey from a colony to market was by smothering the bees with brimstone. Then everything: comb, honey, bee-bread, propolis, dead bees and all went to a press, and the conglomeration was strained through cheese cloth. The resulting mixture was often very unpalatable, unclean and unfit for any market.

### **Wondrous Situation**

I started growing up on the south shore of Lake Erie just after the turn of the century on a 250-acre farm that was elongated over a mile, yet in one place only a lane wide. There were 31 families whose land holdings bordered us. Imagine, 31 linefences to argue over! But it was a wondrous situation for dad's bees. Each year, from the last spring frost to the first one in fall, in the surrounding fields and gardens our bees had flowers galore to pollinate. And they produced a delicious but undoubtedly very hybrid honey. No neighbor objected—or even observed—when our bees took no notice of their "No Trespassing" signs.

There was always canned honey or honey in crocks in our home, for if father had a hobby, bees were it. A huge crock of honey always stood on the cellar floor,

### The BARD and BEES

There was nothing but superstitions about bees until 150 years ago. Below are lines from "Henry V" written by Shakespeare in the late 17th century:

"... for so work the honey bees,  
Creatures that by the rule of  
nature teach  
The art of order to a people  
kingdom;  
Where some, like magistrates,  
correct at home,  
Others, like merchants, venture  
trade abroad,  
Others, like soldiers, armed in  
their stings,  
Make boot upon the summer's  
velvet buds,  
Which pillage they with merry  
march bring home  
To the tent royal of their  
emperor:  
Who, busied in his majesty,  
surveys  
The singing masons building  
roofs of gold,  
The civil servants kneading up  
the honey,  
The poor mechanic porters  
crowding in  
Their heavy burdens at his  
narrow gate,  
The sad-eyed justice, with his  
surly hum,  
Delivering o'er to executors pale  
The lazy yawning drone."

Some still insist Isaac Newton wrote the Bard's plays; scientist Newton never would have written the neat but unscientific lines above.

and many a long winter evening was made short, fragrant, and sweet by gouging honey from this earthen container, boiling it in a heavy iron skillet, and "pulling" it until it became ivory-colored ropes that we cut into tasty, mouth-size portions of taffy. Dad never suffered from rheumatism, and he always credited the two or three bee stings he received at honey-taking time for his freedom from muscle pains.

Had I been reared in many parts of

the world, stay-at-home beehives and their occupants wouldn't have been possible. Huge fields of a single crop: potatoes, wheat, apples—if the orchards are dutifully mowed—won't create summer-long business for bees. So for hundreds of years, as long as there have been wheels or boats, beekeepers have been taking their bees to the flowers which, of course, benefit greatly by the pollinating activity. Presently this is carried on in many parts of the USA and the rest of the world.

John Hunter, an English beekeeper, recorded in a paper in 1898, "In the management of bees, much depends on supplying them with an abundant pasture. A rich corn country is well-known to be to them as a barren desert most of the year." Hunter introduces Seleus, a Latin writer of the 1st century A.D. and author of "De Medicina" who wrote of areas of Greece and Sicily: "... after the vernal pastures were consumed, the bees were transported to places abounding in autumnal flowers... especially the city of Hybla, famous for its nectar-producing flowers." Shakespeare mentioned the Hybla bees in his tragedy, "Julius Caesar."

Pliny the Elder (23-79 A.D.) wrote, "As soon as the spring food has failed in the valley near our town, the hives of bees are put into boats and carried up against the current (of the Po River in Italy) in the night in search of better pastures. The bees go out in the morning in quest of provisions and return to their hives in the boats with the stores they have collected. This method is continued until the boat sinks to a certain depth that shows the hives are sufficiently full; they are then carried back to their former homes where the honey is removed."

M. Maillet, a long ago Egyptologist adds: "One of the most admirable contrivances of the ancient Egyptians is boating their bees annually away from home in order to make honey and then bring them back... like shepherds who travel with their flock and make them feed as they go... It is observed in Lower Egypt that all plants blossom



about six weeks earlier in Upper Egypt than with them. . . . So about the end of October, all the beekeepers of Lower Egypt embark their hives on the Nile and convey them up the river to Upper Egypt, observing to time the voyage so that they arrive when the flowers are budding . . . after they have remained some time at the farthest station they slowly return downstream, the industrious insects working all the way." He concludes, "In fine, about the beginning of February, after traveling the full length of Egypt, gathering all the rich produce of the delightful banks of the Nile, they arrive where they started at the mouth of the river."

To return to my boyhood, many of our neighbors had a hive or two of bees, and when swarming time came, they believed that by raising a clamor (pounding on pots and pans, shaking sleigh-bells, using horns and drums), it would keep the colony from leaving the beeyard. This notion, around for ages, has never worked.

Our hive-keeping neighbors often complained about large dragonflies, kingbirds, opossums, raccoons, and skunks that ate their bees; of robber



bees, mice, rats, even bears that ate the honey. I don't remember that we were ever bothered. Dad worried when there were reports of bacteria-caused "foul brood," of bee moths and bee ticks, but they never came nigh us. Were he living, father would be wondering about the killer bees advancing toward us through Central America and Mexico.

Poet William Butler Yeats expressed an old beekeeper's wish when he wrote in "The Island of Innesfree":

*"I will arise now and go to Innesfree,  
And a small cabin build there, of clay  
and wattles made;  
Nine bean rows will I have, a hive  
for the honey bee  
And live alone in a bee-loud glade."*

**FRED MUSSER, JR.,** Indiana, was awarded the Burkett Trophy and Game Records of the World's "Most Outstanding Big Game Animal in the World" for this Argali ram he took in Mongolia in 1987. A dedicated sheep hunter, Fred and his guide spent ten hours stalking the trophy before he connected on a running shot at 520 yards. For this hunt of a life time, Fred used a 280-caliber designed and built by Jim Peightal, Ernest.





# OKAY.

OVERWHELMING request in the Fall hunters to send up deer. Here are just a few. Selection was based on quality, but there were all the good photos thoroughly enjoyed. Thanks, girls.



**JERRIANNE HUNSINGER**, Sayre, missed this 6-point on the first Saturday of last year's season, but did better the second time around, later in the day.



**SUE STOLTZFUS**, Gordonville, got help taking care of this 7-point from her children Kara and Kale.

**EMILY FAIRCK** went up 1st whitetail.

**SHELBY MILLER**, left, Spring Grove, shot her York County 6-point with a 243. Carol Landis, Quarryville, went to Tioga County for 8-pointer.



**SHARON BUPP**, Thomasville, dropped this York County 9-point on the final day of last year's archery season.

**LORI BRINDEL** and daughter Lydia, above, Aaronsburg, pose with her Centre County 8-point. Doris Schiller, Emporium, dropped this Cameron County 8-point with her "favorite '06."

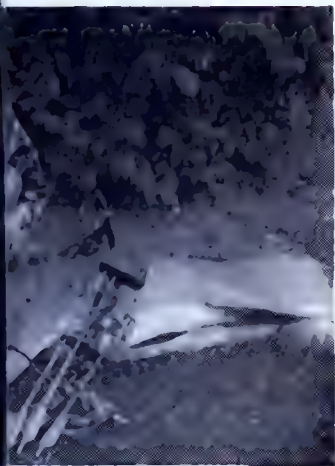




# LADIES

as the response to our  
ary issue for women  
ures of them and their  
ew of those received.  
primarily on picture  
asn't enough room for  
ve received—and we  
ading your notes, too.

**CHARMAINE  
LEIBOLD**, Media,  
built the flintlock  
she used to take  
this Schuylkill  
County whitetail.



**CK, 12, Mt. Holly Springs,**  
County to drop her first



**C H E R Y L  
LEIBOLD**, Orwigs-  
ville, stayed in  
Schuylkill County  
for this 6-point,  
her 11th deer in 15  
years.

**ROBIN BROSSMAN**,  
Reading, poses  
with her first archery tro-  
phy, a Berks County  
6-point.



**LILLIAN HESS**, Fleetwood,  
who took this Berks County  
6-point, also shot a 7-  
pointer in the same area in  
1985.



**ANNIE MORISSETTE**, left, 12, Reading, shown here with  
her parents, dropped this deer only two hours after last  
year's antlerless season opened.







**BRENDA WARRICK**, above, Moscow, took her first buck on the final day of last year's season. Adrienne Blank, right, 15, Boyertown, stayed on the family's Berks County farm for this trophy.



**BETTY MYER**, above, Quarryville, poses with her Lancaster County 8-point. Luncinda Royer, Ephrata, dropped this 4-point in Berks County.



**JANA BOOTH**, Hermitage, went to Warren County for this 8-point, her first buck.



**KIM KUGLER**, Paoli, shot this 8-point whitetail in Berks County. Curry, below, Rollingwood, shot this 4-point in Berks County for her first trophy.



**PAT MINNICK**, Rollingwood, is shown here with her first trophy, a 4-point whitetail, shot in Berks County.





Lion, has been hunt-  
and for 16 years and  
th her third Juniata

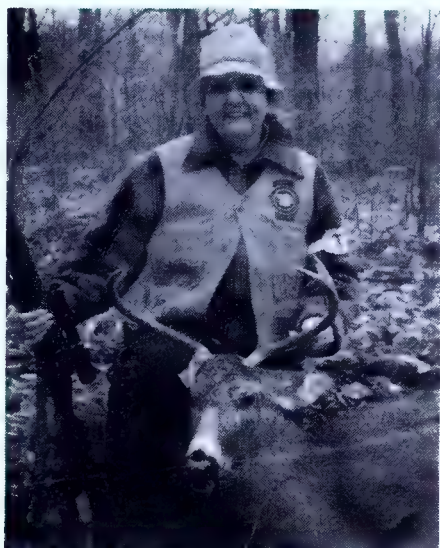


**JENNIFER NEWTON**, Corry, 14, left, has gotten a buck in each of the two seasons she's been hunting. Diane Cresswell, Schuylkill Haven, dropped this Schuylkill County 8-point at 3 p.m. on the final day of last year's season.



, above, dropped this Pike  
an by at 45 yards. Tina  
pring, went to Huntingdon  
kill.

**RUTH ANN GODRA**, Ulysses,  
dropped this Potter County  
7-point with a 270 Winchester.



**DORENE WOLFE**, above, Penn  
Run, poses with the 10th—and  
nicest—buck she's taken in  
23 years. Ginny Hartman, Ali-  
quippa, found this 8-point in  
McKean County.



**VIRGINIA CAVANAUGH**, Gillett, poses  
with the largest of many bucks she's  
taken in 50 years of hunting.







# FIELD NOTES



## New Careers

**YORK COUNTY**—The graduation ceremony for the 20th class of wildlife conservation officers was the first I attended as a spectator, and it felt somewhat strange watching the new officers enter into the same career I chose years ago. The auditorium was filled with many familiar and unfamiliar faces, yet it was obvious we all shared the same pride and sense of tradition. I also felt a little envious, too, of the unknown challenges and experiences the new graduates are facing. Good luck, officers. And although you'll definitely have some trying days, believe me, you made no mistake in choosing this career.—WCO Greg C. Houghton, Emigsville.



## Slow Month

**GREENE COUNTY**—What to do for a Field Note? Everything was just so routine last December. I patrolled almost 3000 miles in 15 days; checked many deer; all my deputies worked nearly nonstop; I found one guy with a counterfeit deer tag; another fellow nearly left me deaf when his “empty” gun blew a hole in his trunk; and I had five flat tires.—WCO R.P. Shaffer, Carmichaels.

## Be Patient

**DAUPHIN COUNTY**—If you've erected nest boxes but aren't getting any occupants, be patient. Three years ago Evan Smith and I moved a threatened barn owl family to the safety of his barn, hoping that the owls would stay there. Well, after successfully raising their two young, the owls moved out. Our box remained vacant for three long years, until last winter, when some barn owls finally moved in.—WCO Scott Bills, Halifax.

## Orderly

**PHILADELPHIA COUNTY**—It was early one Sunday afternoon when I noticed a herd of deer approaching a major four-lane highway. I immediately pulled my truck over, put on the four-way flashers and red light, and stopped traffic in both directions. The deer, 14 of them, stopped at the curb, seemingly waiting until everything was ready, and then crossed the highway in single file. Now I can add “crossing guard” to my job description.—WCO Richard J. Shire, Philadelphia.

## Thanks, Guys

**CLEARFIELD COUNTY**—When land manager Quig Stump found a bobcat accidentally caught in a fox trap on SGL 100, he immediately called me to help him process and release the animal. While tagging it we noticed its right hip was broken, probably from a motor vehicle. We took the injured animal to Clearfield, where veterinarians Larry Wooten and Mike Brown repaired the hip by installing a stainless steel pin. After a few weeks of recuperation, the cat was released, as good as new.—WCO Donald L. Zimmerman, Drifting.



## Come On, Al

**BRADFORD COUNTY**—After killing a deer on the last day of buck season, Al Homan, Landing Creek Road, put the deer in the trunk of his vehicle and drove home. Once there, however, after unloading all his gear and cleaning his rifle, Al was too tired to take care of his trophy, so he left it in his trunk. The temperature dropped over night, though, and when Al went out the next morning he found his deer frozen in such a position that it couldn't be removed from the car. Not knowing what else to do, Al sawed the deer's legs off while it was still in the trunk. Since then, Al's been telling people he hunted the legs off the deer before shooting it. But—as Paul Harvey would say—now you know the rest of the story.—WCO William A. Bower, Troy.

## Pileated

**COLUMBIA COUNTY**—My son Daniel recently discovered a new species of bird. After hiking in the woods near our home he told me, "We sure have a lot of petronated woodpeckers around here, Dad, there are big holes all over the pine trees out back."—WCO George Wilcox, Millville.

## Busy, Busy, Busy

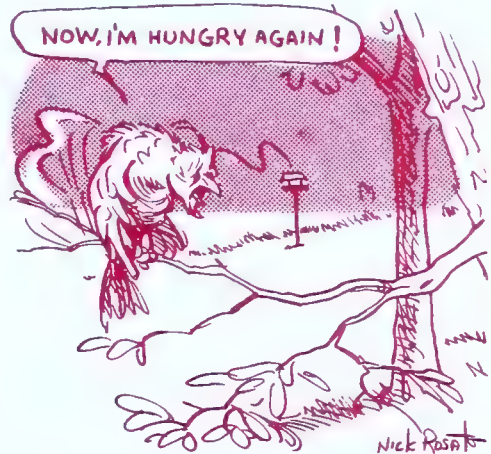
**WAYNE COUNTY**—Does anyone else ever get tired of hearing, "I bet things are really slow for a game protector at this time of year."? For years I waited for the slow season to arrive, until I realized it was never going to come. Our emphasis might shift from law enforcement to information and education programs and animal nuisance problems, but things never slow down.—WCO Donald R. Schauer, Honesdale.

## Wild Ones

**TIOGA COUNTY**—With the numbers of bobcat and coyote sightings, complaints and even roadkills, I think this county is going to the cats and dogs.—WCO Frank Bernstein, Middlebury Center.

## Satisfied Constituents

**BEDFORD COUNTY**—Having manned the Game Commission booth at the Harrisburg sports show for the past 12 years, I've heard my share of complaints. But at this year's show I didn't hear one negative remark about the agency. It really made my day.—WCO Dave Koppenhaver, Everett.



## Long Distance Travelers

I was walking in the woods last January when my attention was drawn to the songbirds feeding at the several feeders around my home. I was amazed at how far birds were traveling to feed. Some flew from more than 1000 feet away, ate a little, and then flew back into the woods where they had come from.—LMO R.B. Belding, Waynesburg.

## Harmonizing

**SCHUYLKILL COUNTY**—Trainee Tim Conway and I were out on night patrol when a vehicle passed by on a lonely dirt road. I told Tim that Deputies Karl Franz and Bobby Rozetar were in the car. When Tim asked how I knew, I told him I could hear them arguing. Nothing more was said until we met up with the deputies. When I told them I heard them arguing as they passed my position, Bob replied, "We weren't arguing. It's oldies night on the radio, and we were just singing along."—WCO John Denchak, Gordon.



### Old Timers

**SUSQUEHANNA COUNTY**—Bobcats, coyotes and river otters are showing up here at steadily increasing rates. Now, if we can confirm the many panther sightings that have been reported over the years, we will be back—as far as wildlife goes—to near where we were when Indians ruled these parts.—WCO Charles J. Arcovitch, Kingsley.

### And More on the Way

**TIOGA COUNTY**—With many hunters being permitted to harvest two deer last year, some people thought the deer herd would be drastically reduced. Well, since the deer seasons concluded, the number of roadkills I've had to handle is considerably above average. There are still plenty of deer left.—WCO Steve Gehringer, Mansfield.

### Dangerous Combination

**COLUMBIA COUNTY**—I was picking up uniforms at the cleaners when I met a lady dropping off her husband's orange hunting coat. It turned out she had discovered a new reason to quit smoking. Several days after the flintlock season, she put on her husband's coat, dropped her cigarettes and lighter in a pocket, and headed out. Later, when she reached in for a smoke, she found a handful of loose blackpowder in the pocket.—WCO Steve A. Smithonic, Catawissa.

## Remember Who's Footing the Bills

**BLAIR COUNTY**—A local controversy developed last year over a proposal to establish a hiking, biking and cross-country ski trail on a state game lands. Space doesn't permit going into all the issues, but what became all too apparent is that many nonhunters don't realize that it's exclusively hunters and trappers who've paid for and are maintaining state game lands. Is it right for noncontributing special interest groups to impose their desires on those who bear the costs? I think not. But let's remember, hikers, skiers and other outdoor enthusiasts are free to use state game lands, providing their activities don't conflict with the fundamental purpose of these lands—to enhance our wildlife resources.—WCO Steve Kleiner, Altoona.

### Be More Careful

**YORK COUNTY**—I was working at our booth at the Harrisburg Farm Show when an irate man came up and wanted to know what I was going to do about all the deer running into his vehicle. He said six had hit him in the past four months. I suggested he take a defensive driving course.—WCO Robert L. Yeakel, Red Lion.

### Looming Problems

**LUZERNE COUNTY**—We will someday be remembered as the generation that took everything for granted, especially our natural resources. The demand for clean water, for example, is a major issue in many areas today, but when conservationists began stressing the need to save wetlands and keep our waterways free of pollution years ago, they got little support. I often think of the May 1974 *GAME NEWS* editorial, "Where is the Eagle," which concluded with, "And what is it to say good-bye to the swift and the hunt, and the end of living and the beginning of survival." Have we arrived?—WCO Robert W. Nolf, Conyngam.



## Unseasonable

**DELAWARE COUNTY**—Last winter's mild weather wasn't necessarily good for the deer herd, at least in this county. The number of roadkills was up, and many deer were apparently going through a late rut, according to the fresh scrapes and rubs evident at that time. —WCO R.C. Feaster, Aston.



## Cautiously

It's no surprise that squirrels, mice, tree swallows, wrens and other songbirds often use the wood duck and bluebird nest boxes we erect. But last winter my food and cover crew brought in a wood duck box that had been occupied by yellow jackets. The insects had sealed the entrance and constructed combs on the inside walls. Needless to say, the men have started exercising a little more caution when reconditioning our nest boxes.—LMO Stephen L. Opet, Tamaqua.

## Local Hotspot

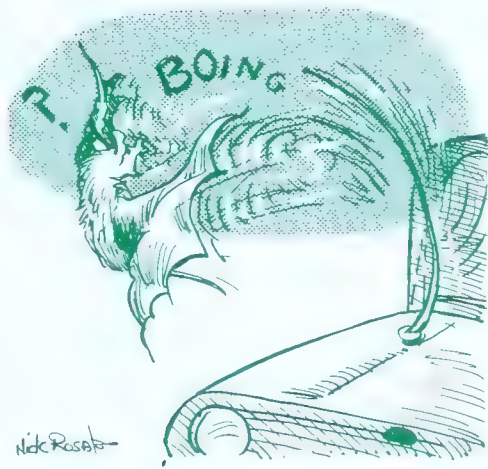
**JUNIATA COUNTY**—I've picked up more roadkilled deer from the stretch of Route 75 between Honey Grove and East Waterford, particularly near Bailor's sawmill, than any other place in the county. If you're driving this stretch, be careful, especially at dusk and early in the morning, when deer are most active. —WCO Dan Clark, Honey Grove.

**Good Question**

**SCHUYLKILL COUNTY**—At last winter's meeting of the county Federation of Sportsmen's Clubs, I signed up several new clubs to participate in the Game Commission's seedling program. Through this program, the agency provides free seedlings to sportsmen's clubs and other nonprofit organizations, for planting on lands open to public hunting. That got me to wondering; if it weren't for dedicated outdoor enthusiasts, and wildlife agencies, who else would care for our wildlife?—WCO John C. Shutkufski, Pottsville.

## Good Reminder

**CAMBRIA COUNTY**—It looked like prices had been drastically slashed. As I pulled up to a deer processor's plant I immediately noticed a sign saying, "Save \$25." Then, in fine print, I read, "Be sure to mail in your deer harvest report card."—WCO R.J. Weaver, Johnstown.



## Confused

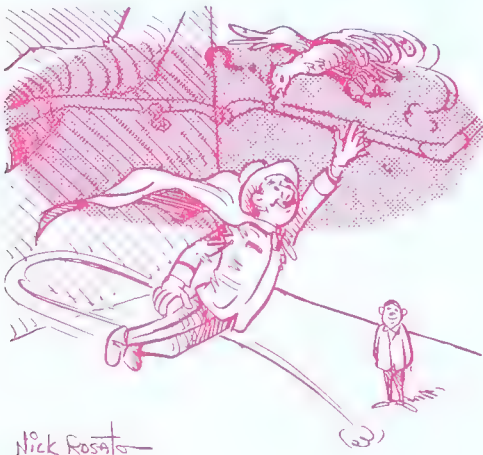
**WESTMORELAND COUNTY**—Dep-  
uty Dale Sleasman and another officer  
were watching for late spotlighters last  
fall when every now and then they heard  
a “thunggg” sound. The mystery was  
solved when they noticed a bat on the  
hood of their vehicle. The bat had ap-  
parently been attracted to the radio an-  
tenna and kept flying into it.—WCO  
R.D. Hixson, Ligonier.

## The Proofs Everywhere

**CLEARFIELD COUNTY**—Last November I handled 20 roadkilled deer. Half were bucks, and 17 were hit on I-80. After spending more than half of one work day disposing of roadkills, I wondered why some people still question the agency's deer population estimates. The number of roadkills has been increasing for years, and I assure you, the figures are not fabricated—my back will attest to that. I think from now on, when anybody questions our deer population estimates, I'm going to invite them to help me clean the carcasses off the roads. —WCO Colleen M. Shannon, Luthersburg.

## Very Important

**BEDFORD COUNTY**—After experiencing the throngs of outdoor enthusiasts at the Harrisburg and Altoona sports shows, it's obvious how important wildlife is in today's society. Not only do Pennsylvanians have an intense interest in the outdoors, they're also devoting a great deal of leisure time to enjoy it. —WCO Tim Flanigan, Bedford.



## Super Jack

**CENTRE COUNTY**—After spending two hours above the suspended ceiling at the Bellefonte BiLo Store, working around duct work, pipes and I-beams, trying to capture a sharp-shinned hawk, I started to wonder when I'm going to be issued a cape. —WCO Jack Weaver, Bellefonte.

## All Pro

**ARMSTRONG COUNTY**—Patrolling during the past hunting seasons was quite unusual for me. I got many second and third looks, heard the question "Is that who I think it is?" more times than I could possibly remember, and in one instance I had to put an end to an autograph session that had been going on for at least ten minutes. Best of all, though, came after we interviewed the victim of a hunting accident. I heard from a nurse later that the victim asked if he had been hallucinating during the questioning. No, his mind hadn't been playing tricks on him. Former Pittsburgh Steeler linebacker Jack Lambert is now a deputy wildlife conservation officer. And before anybody else asks me, no, his badge number is not 58. —WCO B.J. Seth, Worthington.

## Yep

**LYCOMING COUNTY**—After gathering evidence and bringing about a successful prosecution of a game law violation, it was interesting to read about the case in a local Sunday newspaper. The news account concluded, "More important, the head and hide were returned to Pennsylvania authorities." Well, I hope our law enforcement efforts haven't been reduced to just collecting trophy mounts. Contrary to the published opinion, the most important part of the case is that the violators were apprehended and justice was duly administered. —WCO Dennis Dusza, Williamsport.

## Just Checking

**CRAWFORD COUNTY**—I was walking on SGL 69 last January, trying to determine how many turkeys were wintering there. When I came upon about six sets of fresh tracks I followed them and eventually caught up with the birds. After finding no other turkey sign, I started back to my vehicle, only to find several sets of fresh tracks over the ones I had made coming in. I wonder if the turkeys were conducting their own survey. —WCO Robert Criswell, Meadville.





**PGC BIOLOGIST JERRY WUNZ** was this year's recipient of the National Wild Turkey Federation's Henry S. Mosby Award, as a tribute to his wild turkey research and management programs and his education efforts.

## Wunz Honored with NWTf's Mosby Award

**G**AME COMMISSION biologist "Jerry" Wunz, Milroy, recently received the National Wild Turkey Federation's 1989 Henry S. Mosby Award. Wunz was recognized at the 13th annual NWTf convention, held in February in Nashville, Tennessee.

In presenting the award to Wunz, NWTf chairman Dr. J.G. Dickson said, "The 1989 recipient characterizes and personalizes extremely well the ideals of the prestigious Mosby Award. He is a man of ideals, conviction, dedication and integrity; and the wild turkey and sportsmen have benefitted tremendously from his efforts. He is a true leader in wild turkey research, management, and education.

"He was instrumental in restocking the wild turkey throughout his state, restoring wild turkeys in previously regarded marginal habitat, and setting the stage for restoration in other states and nations.

"Wunz's research concerning habitat requirements, spring seeps, forest clearings, forage plants and plantings have provided valuable management infor-



mation," Dickson continued. "He has written many popular articles, explaining biology to sportsmen.

"He has always been a true advocate for wild turkey and sportsman, even when politically unpopular. He pointed out the futility of game farm turkeys and winter feeding programs, even when it meant jeopardizing his job."

Wunz has been with the Pennsylvania Game Commission since 1959, as wild turkey research project leader specializing in forest habitat research. Since 1980 he has also been leading a study of gray partridge introductions. He has served as a wildlife consultant to several states, Canada, and West Germany. He has been a guest lecturer at universities and state workshops, and an invited participant on numerous NWTF committees and panels.

He has served as a member of the NWTF Technical Committee since 1976 in an advisory capacity. The group, composed of wild turkey biologists representing the various state wildlife agencies, meets annually to discuss new

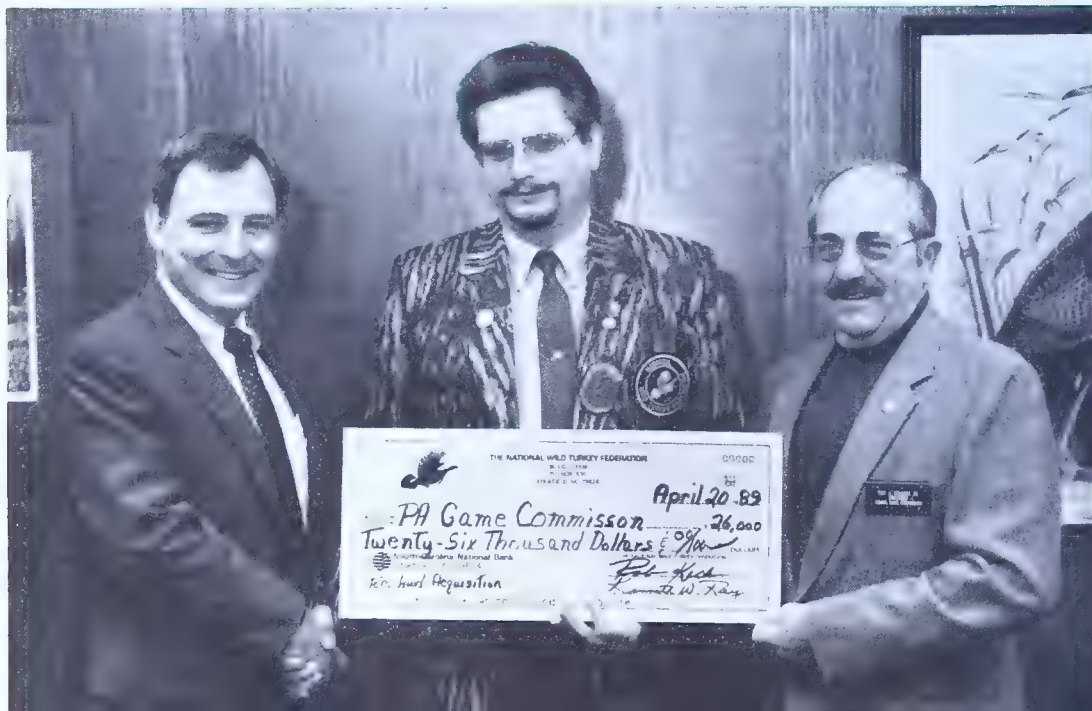
ideas in wild turkey management and research. Additionally, the technical committee makes recommendations to the NWTF board of directors on the grants-in-aid made annually by the Federation.

Wunz is an outdoor writer, lecturer and photographer. His credits include *GAME NEWS*, *Sports Afield*, *Outdoor Life*, *American Hunter*, *Natural History Magazine*, *Pennsylvania Angler*, *American Sportsman*, *Fur-Fish-Game*, and *Turkey Call*, the bimonthly magazine of the National Wild Turkey Federation.

He and his wife, Evelyn, have three grown children. Wunz was born in New Castle, and received B.S and M.S. degrees from Pennsylvania State University. He worked for the Kentucky Department of Fish and Wildlife Resources for eight years on bobwhite quail and farm wildlife habitat research before returning to Pennsylvania.

Wunz is the third recipient of the Mosby Award, which was instituted to honor Henry S. Mosby, renowned wild turkey biologist, professor and writer.

**THE PENNSYLVANIA CHAPTER** of the National Wild Turkey Federation recently presented the Game Commission with \$26,000 for our land acquisition program. The funds were used to help purchase from the Western Pennsylvania Conservancy a 624-acre tract adjoining SGL 51 in Fayette County. Howard E. Meyers, Chairman of the chapter's Land Acquisition Committee Super Fund, is shown here presenting the donation to Executive Director Pete Duncan and Commission President Roy Wagner.





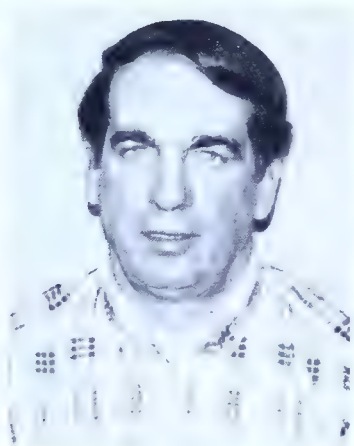
# Pennsylvania Game Commission

## 25-Year Club

*Pennsylvania Game Commission personnel have compiled an enviable record among public and conservation agencies for longevity of service. Few organizations in any area of endeavor can boast so many dedicated employees. The most recent PGC employees to complete 25 years of service are shown here.*



**Elwood W. Orner**  
Labor Foreman  
Southeast Region  
Wellsville



**Daniel O. Brown**  
Food & Cover Corps  
Southwest Region  
Worthington



**Norman E. Cook**  
Labor Foreman  
Northwest Region  
Guys Mills



**Betsy Maugans**  
Administrative Assistant  
GAME NEWS  
Harrisburg



**Jim Filkosky, Chief**  
Hunter-Trapper Education  
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# Underfoot

**N**EVER BRAG that you walked five miles in the course of a day's hunt. Some wise old gunner will humble you by saying, "Listen, gal, it's your eyes you hunt with, not your feet," meaning I was walking too fast and not watching well enough, or I'd have a fuller game bag in much less distance.

There's nothing wrong with crossing the next hill, like the bear that went over the mountain, to see what's on the other side. I believe that hunters who take the same deer stand or hunt the same rabbit patch year after year are missing a lot by not exploring for better, or at least optional, hunting turf. If there are "couch potatoes," so are there "stand potatoes." But, as the old timer reminded me, it isn't the amount of ground we cover, but how well we cover it. Don't just look where your feet are going, see. That's an integral part of being a successful hunter, both in game taken and pleasure gained.

Watching where we walk is something we hunters ought to do literally. As we move through the woods, we look for silvery squirrel tails on high limbs, and the horizontal brown line of a deer's back on our own level. But other than to make sure we don't trip, we pay too little attention to what is under our feet. As we place one boot in front of the next, we are trampling on much that is informative, interesting, and simply beautiful.

With few exceptions, game animals' main mode of travel is just like ours—with their feet on the ground. And just like the bootprints we make with every step, they can't help but leave a record of their passing. We won't find the actual animal by watching at the tips of our toes, but we will discover a lot about its lifestyles and probable current whereabouts.

Perhaps short people notice what is under their feet because their eyes are closer to the ground. I know I seem to see more wildlife sign than many of my more airily built hunting companions. I

often stop them to point out something the rest have stepped over. After several windy days during the last week of 1988's buck season, I found a group of freshly opened scrapes and a rub with bark shavings still on top of the leaves. I posted nearby, but didn't see anything. My interpretation of the ground sign was right, though. Several muzzleloader hunters reported seeing a good buck in the vicinity later in the month.

Wild animals make both deliberate and accidental changes in the ground cover that are telltales of their presence. The woods floor is a maze of animal trails and sign, disturbances in the "normal" appearance that are sometimes distinct, sometimes barely perceptible, but all there to be seen. Even individual deer hooves will make depressions in or overturn the leaves so they look disordered, flagging the fact that something passed this way.

## Mysteries

Sometimes what I see is a mystery. Why all the grouse feathers here? Something has made, or tried to make the bird a meal. I look closer to see if death came from above, an owl or hawk, or if a fox leaped out from behind a log. If I'm very lucky, in the marks of the scuffle, the trace of clawed feet, the brush of bigger wings, I find the answer.

At other times, watching where I walk solves a dilemma. Where would be the best place to ambush a buck? Does he have a favorite run? How about this line of scrapes and rubs he's made along

## Another View...

by Linda Steiner



**WITH FEW exceptions, game animals' main mode of travel is like ours—with their feet on the ground. And just like the bootprints we make with every step, they can't help but leave a record of their passing.**

the old woods road? Anywhere on the path should be a good spot for a stand. If I can place what I've seen underfoot into a pattern to help make game activity more predictable, I'm improving my chances for success.

In what I step on, I also learn about the current year's food sources for wildlife. I notice when I'm walking on a lot of acorns, and whether the whole ridge has a crop this fall, or if it's just a few lone trees that are producing heavily. Even these are worth remembering, because they are powerful magnets to forest animals. Conversely, if I see I've been treading on oak leaves, but haven't crunched a nut, I know to keep hiking.

Last autumn, with acorns spotty in my hunting area, to find the turkeys you had to find the cherries. In many locations, the bottom of my boots became purple from walking on the wild fruits. The first day of bow season, a big flock fed just beyond my boot tips, on the nearly solid carpeting of wild cherries

surrounding me. Once turkey season opened, I never saw the birds, but wherever I found cherries, they had scratched. Other dropped wild berries and seeds provide clues as to whether a section of forest will be "gamey" this year or not.

Underfoot, I found more than just wildlife's story. I read a history, both of the Earth and Man. I notice, and pick up to weight down my hunting coat pockets, interesting rocks, fossils and artifacts. I have a collection of flint arrowheads and spear points, as well as a box of old bottles, found in forests where once the native Indians, early settlers, loggers and oil boom hopefuls were active. In Warren County I've walked on rocks studded with shell fossils from an ancient sea bed that had been lifted to the mountain tops. The most remarkable sight I've witnessed underfoot was on an archery hunt in New Hampshire. I hiked a trail that seemed paved with silver and gold. I'm not a geologist, but I have the feeling it was very mundane mica and schist. No matter, it looked glorious.

In the outdoors, everywhere a hunter looks he finds a work of art. The ground beneath us is no exception. Not every sight is as unusual as that path of "gold," but in the autumn, the fiery and deep reds of fallen maple leaves are a rivaling mosaic. In the low winter sun, the surface of the snow presents glittering flecks like multicolored gems. Soft green mosses and both brilliant and pastel wild flowers decorate the ground in the warmer seasons. These unexpected still lifes are waiting not for the painter, but for the eye of the hunter to see them, as he sees wildlife sign, the natural bounty, and the traces of history, under his feet.



# Fun Games

## “WILDLIFE SEARCH”

By Connie Mertz

R E E D D E L I A T E T I H W  
U S H O R T E A R E D O W L I  
F L Y I N G S Q U I R R E L L  
F S U B R O W N B A T E V O D  
E **B** C E L O V W O D A E M **T** T  
D O O F A A Y E R P S O M C U  
G R R S **A** X C B B E A V E R R  
R E E D L L I K L V D P P O K  
O P O S S U M C B U O F O W E  
U T T A R K S U M E E W O O Y  
S L L I **T** C C H E T A B K X S  
E A T F R A C C O O N R I **I** U  
M S T R I P E D S K U N K R S  
O B A R R E D O W L F L I E D  
E N I P U C R O P W O **H** I L K  
K C U D D O O W W I R T O S **A**

Find the following species of wildlife in the puzzle. Unscramble the colored letters in the puzzle, and discover what all wildlife needs for survival.

Whitetailed Deer  
Woodchuck  
Muskrat  
Red Fox  
Opossum  
Flying Squirrel  
Crow  
Bluebird

Ruffed Grouse  
Black Bear  
Meadow Vole  
Osprey  
Striped Skunk  
Porcupine  
Barred Owl  
Short-eared Owl

Killdeer  
Brown Bat  
Wild Turkey  
Beaver  
Raccoon  
Dove  
Wood Duck

From this list circle the two endangered species in PA.

*Answers on page 64*



**By Jack Weaver**  
Wildlife Conservation Officer  
Centre County

**I**N 1969 and 1970, the 3140-acre watershed around the city of Reading's Lake Ontelaunee reservoir was a state game propagation area. State game propagation areas are sacred ground, and mere entry into them is forbidden. If not protected under Holy Writ, they are certainly haunted by vengeful spirits—namely those of us who wear green. But the problem with Game Law enforcement in the propagation area around Lake Ontelaunee was that certain sections were open to fishermen while other sections were not.

If you were a licensed fisherman you could enter these open sections to fish, but you were not permitted to take a non-fishing guest or a pet, or build a fire, and so on. Posters denoting the open and closed areas were similar in appearance, which added to the confusion. A family, for example, on a Sunday drive into the country might see fishermen along the shore and stop to explore the tall pines, or walk in to see how the fish were biting. But often they would not bother to read the posters with all their fine print. This was stressful for both the officers and the public. Generally, warnings were given for these more or less innocent violations.

But as a propagation area, the watershed was rich in wildlife. Thousands of ducks and geese cruised the 1100-acre lake, cockbirds chased each other and

their girlfriends in the thickets, big-racked bucks could be seen feeding in open glades in the evenings. And the tall pines, laced with miles of gravel roads, provided excellent habitat for mourning doves. The doves would light along the roads each day in search of grit. It was there that I ambushed them. There, and in the shale pit behind Peter's Creek.

I trapped and banded mourning doves in cooperation with the U.S. Fish and Wildlife Service each summer. The traps were light wire affairs, perhaps two feet square. Each trap had two funnel-shape tunnels leading inside. A handful of cracked corn was placed in the center of the trap, with a trail of bait leading out through each tunnel. The birds would follow the bait inside, heads down, eating as they went. Once inside, they couldn't figure out how to get back out. This way we trapped and banded upwards of 200 birds each summer. But it was a never ending job as the traps had to be checked twice each day or the birds would perish in the summer sun. Because of this, whenever I wanted a day or two off, I had to turn the bottomless traps upside down so the birds wouldn't get caught. This fact, when noticed by some neighbors, was to provide an unusual adventure during the summer of 1970.

The shale pit at Peter's Creek was by far the most productive trapping spot of all. Doves congregated here where there was abundant grit in a relatively open area. Adjoining the shale pit and our prop area was a large open field. Approximately 200 yards from our boundary, across the field, was a mushroom plant. We called them mushroom houses because the employees and their families lived in row homes built in a horseshoe around the factory. Most of these folks were Puerto Rican. Problem is, they loved birds. That is, they loved to eat birds—all kinds of birds.

In the middle of the field, halfway between us, was a small circle of unusually tall oaks and brush. It would be here, in August, that our story would come to a graphic conclusion.

Meanwhile, it was June and I'd been checking traps twice daily since the beginning of May. So one Friday evening I flipped all of my traps over to enjoy a well earned weekend off. When I returned on Monday I found the traps at the shale pit were set upright with a sizable rock placed on top. And they were baited with



whole kernels of corn. I used cracked corn. Immediately, I suspected that the watershed employees were playing games with me. But they had the weekend off too. In fact, they had every weekend off. I tossed the rocks off the traps, rebaited them, and went on trapping and banding doves. The next week or so passed without incident.

The next time I took off I again flipped the traps upside down. When I returned a few days later I found them upright, rocks on top and baited with whole corn again. But this time as I pulled in I noticed a group of men walking away toward the mushroom house. Then it all came together with a rush, and I understood what was going on. They were using my traps while I was gone to take pheasant chicks. Young pheasants would often get inside the traps, but usually the hen would make such a fuss, literally attacking the trap, that she would eventually tilt it enough to let them escape. Thus the rocks. The men were near the buildings now, so I dashed into the stand of oaks between us for a better look. After the suspects disappeared indoors, I took stock of my surroundings.

I was in an ancient graveyard. The graves were caved in, with woodchuck holes running down into what is best left undisturbed. The stones were tilted, broken and badly weathered. I couldn't read the inscriptions, which appeared to be in German, but I could make out dates in the 1600s on some of them. I noticed several new 50-gallon drums standing on end and some coils of copper tubing nearby, but this didn't fully register, for now I was in a huff. Imagine, taking pheasants in closed season, in my prop area, and with my traps!

Well, I decided right then and there I was going to take the next weekend off, too—sort of. On Friday afternoon, just as I had done before, I turned the traps upside down and left. But Deputy Randy Haag and I slipped into the shale pit early the next morning, and as luck would have it, the traps were full of pheasant chicks and some doves and songbirds. We took up stations in the thick jungle of the surrounding prop area and waited.

Along about noon we noticed four individuals coming toward us from the mushroom house. They marched straight to the prop area and entered the shale pit. When they spotted the traps full of pheasant chicks they started jabbering like runaway

teletype machines. Spanish is like that, especially when a native gets excited. They were having a ball, pulling both pheasants and songbirds out of the traps and wringing their necks, until Randy and I stepped out of hiding and yelled, "Game Commission—freeze!"

So much for verbal commands. There was an explosion of instantly released pheasants and a profusion of arms and legs pumping madly across the field. We managed to grab two out of the four. Of course, nobody but us spoke English. When we tried to ask who the accomplices were, the only thing I recognized was a bewildering, "Aye, ay, aye, ay, aye, ay, aye!" Which they both repeated in chorus.

The two were charged with disturbing Game Commission traps, taking pheasants in closed season, and entering a state game propagation area. Back then the whole bill came to \$85 each. At least it bought me a few weeks of trouble free dove banding through the month of July. Then it started again.

About the middle of August I returned to my traps from another weekend off only to find that the ones set at the shale pit were missing entirely. I had been having occasional problems with reservoir employees driving over my traps with their equipment, so thought they might have tossed the flattened evidence into the brush. But they claimed not. I set more traps only to have them come up missing again the next Monday.

My suspicions turned back toward the mushroom house. Taking my binoculars, I slipped once again into the old graveyard in the middle of the field. When I did, I noticed some changes. The high weeds had been cleared away under the trees and piles of firewood were stacked around. A couple of the 50-gallon drums were lying on their sides. Some plumbing was attached to these drums by way of a faucet and copper tubing. But it didn't seem to be connected to anything in particular, so I didn't pay much attention at first. Then I noticed several men walking in the cleared area around the buildings. Through my binoculars I recognized Julio, one of the men we had arrested back in June. As I watched, they bent down to adjust what looked like one of my dove traps. They had taken my traps and placed them next to their houses, probably thinking I wouldn't bother them there. They didn't know me very well.



The next night Deputy Al Hauser and I returned, intent on a commando reconnaissance raid. It was 3 a.m. and pitch dark. Once again we slipped in among the old tombstones to see if man or beast stirred near the mushroom house. We had to use a flashlight inside the trees, and when the light came on Al exclaimed something in Dutch that sounded unprintable. Among the graves were two stills, set up and ready to go. In fact, it looked like they'd already been going some. Al pried a lid off one of the drums standing on end. It was full of molasses mash. Empty bags of sugar lay on the ground. "I believe they're making rum," Al said.

"Let's slip in and have a look around those buildings," I replied. My mind was still on my dove traps. After all, I was a game protector, not a revenue agent.

Fortunately, they didn't keep any dogs. We walked all around the building where I'd seen the men fooling with the trap two days before. But we didn't find any traps. Even right next to the buildings no traps were found. So I figured they took them inside at night. Now, there was no evidence with which to procure a search warrant, and it would have taken a small army to search all those residences. But sitting on the edge of a back porch was a two-gallon plastic milk jug with some clear liquid inside. Popping the cap, I was nearly overcome by the fumes. I didn't need to take a swig—I knew what it was and where it had come from. So, I thought, they've gone from using my traps to catch pheasants, to stealing my traps to catch pheasants. That escalated the situation from a border conflict to all out war. The next morning I called the Liquor Control Board.

I soon met one of their agents and slipped him in for a peek at my friend's rum factory. He got really excited, explaining that you just didn't find this kind of setup these days. He could hardly believe what he was seeing. The next day was Saturday, so we decided to set an ambush. Law Enforcement Supervisor Dick Orr and I checked out a big yellow Game Commission portable radio and met the agents at daybreak. There were two car loads of them, all armed with shotguns. We hid the cars in the adjoining prop area, and I suggested that only a handful of us

should approach the old cemetery. We could keep in touch with the others by radio. They agreed.

I led four agents to the stills, which were perking merrily away when we arrived. No one was around, and the agents got so excited checking over that equipment and taking pictures that we nearly missed seeing a group of men approaching from the mushroom house. When we did they were halfway to us. Barely in time, everyone dove into the weeds and whatever brush we could find. But we failed to hide the big yellow radio. There it sat on the remnant of what must have been a handsome stone wall surrounding the old cemetery.

A few feet from the radio, the path from the mushroom house led through a break in the wall, into the circle of trees and among the broken tombstones, the stills, and the waiting officers. The men, four of them, were pushing a wheelbarrow full of kindling. About the time these fellows reached the wall, someone back with the reinforcements decided they'd better check on what was happening. A voice crackled from the portable radio. Time stood still as the suspects stared in astonishment at the yellow box on the wall. Then they abandoned the wheelbarrow and turned to run, but an officer leaped onto the path and yelled, "Freeze!"

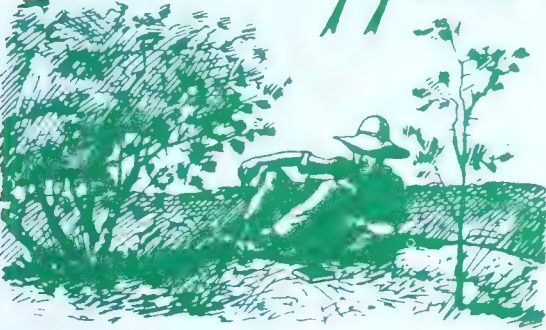
I figured things would move into high gear immediately. But not only did those guys freeze, their hands also shot into the air in the classic sign of surrender. Shotguns speak volumes in any language. And there in the midst of them was my old buddy Julio, one of the pair we'd caught raiding my traps in June. He took one look at me and once again I heard the bewildering, "Aye, ay, aye, ay aye, ay, aye!"

Once the prisoners were handcuffed and marched over to the waiting cars, the real fun began. To this day I don't know where all those vintage fire axes came from. But in the finest tradition of Elliot Ness, the agents went to work chopping up those stills and draining their contents onto the ground. I imagine the woodchucks had a real fling that night.

Several months later Julio and his gang were fined \$500 each and placed on two years' probation. And so, the great Ontelaunee still raid passed into history. You know, I never did recover my dove traps.



# Thornapples



*Chuck Fergus*

**THE PINE'S BARK** suggested a photograph of the earth taken from several miles up. Spider webs spanning the scaly gray-brown ridges looked like clouds spread out over valleys. Flecks of lichen were ponds. Slowly, my eyes recalibrated themselves and were drawn upward by the thick, forest-shaded trunk, which rose arrow-straight and innocent of limbs for 50, 60, 70 feet, to where the tree forked; from there the two segments—each thicker than most trees I am accustomed to seeing—continued on up through a tier of foliage until the top of the pine emerged, feathery and sunlit green, above its neighbors' crowns.

"The first time I measured the height," Ted Grisez said to me, "I got one-seventy. I couldn't believe it. I backed off, went in the other direction, and measured again. One-seventy."

Grisez—the name is pronounced grih-SAY—stood bent back at the waist, looking up. He held his hat, a soft porkpie, on his head with both hands. Grisez is short and spindly, with pale blue eyes and graying hair. A tattered workshirt hung upon his frame. He smiled up shyly at the great pine. "Looks nice and healthy," he said.

He got a tape measure out of his pocket, hooked the end onto a ridge in the bark, and walked the tape around the trunk about four and a half feet up from the ground—breast height. "Twelve point five feet." He turned the

tape over and read the other side. "One hundred fifty inches." The tree, alongside a footpath in the Hearts Content Scenic Area of the Allegheny National Forest, is the largest white pine known in Pennsylvania. In the two decades since Grisez nominated it as a state champion, the pine has increased in girth by four inches, in height by seven feet. Its 17-story height implies that it is the tallest tree in the Keystone State.

Grisez is a retired silviculturist for the U.S. Forest Service. He lives in a modest frame house on the edge of Warren, a small industrial city in northwestern Pennsylvania. South and east of Warren lies the Allegheny National Forest, where, among other places, Grisez has 14 state champion big trees.

## Big Tree Program

The Big Tree Program is sponsored by the Pennsylvania Forestry Association, a private, nonprofit organization that urges people of all ages and professions to hie themselves to forests and woodlots and bottomlands and campuses and back yards to find the biggest of every kind of tree in Pennsylvania. All states except Arizona, Montana, Wyoming, and West Virginia have their own Big Tree programs. Since 1940, the American Forestry Association in Washington, D.C., has kept a National Register of Big Trees: the champion American basswood grows on a Cincinnati street, the



co-champion Sitka spruce towers up in Washington's Olympic Peninsula. Reads a line in *American Forests*, the AFA's magazine: "That regal old tree down the block or near your favorite fishing hole could be a Champion awaiting your tape measure."

In Pennsylvania, tree hunters have stretched their tapes around the boles of state-record silver maples (23 feet) and common chokecherries (1 foot 8 inches); they have determined the heights of hemlocks (124 feet) and hawthorns (26 feet) and have calculated the crown spreads of chinkapin oaks (120 feet) and devil's-walkingsticks (17 feet). These and approximately 200 other record trees appear in *Big Trees of Pennsylvania*, published by the state Forestry

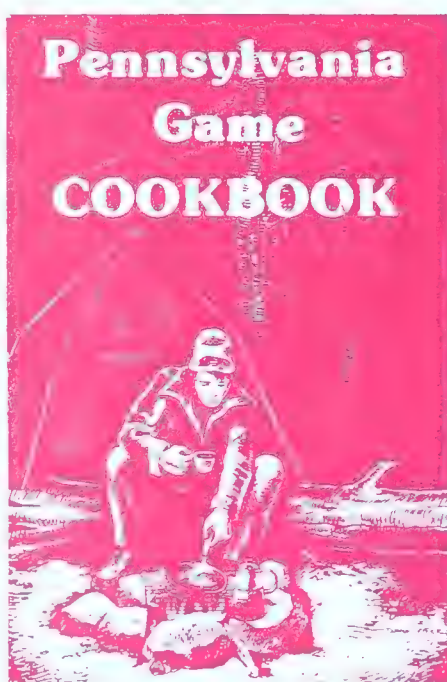
Association. The book lists both champions and co-champions, which score within ten points of the champs.

The reigning devil's-walkingstick is also a Ted Grisez tree, and after visiting his signal white pine, we decided to check it out. The devil's walkingstick—named for its wicked, spine-studded trunk—grew on the edge of an old clearcut just off a forest road in the Allegheny National Forest. We did not cast our eyes upward to find it; rather, Grisez consulted a pocket spiral-bound notebook.

"... on the left side of the trail, fifty feet past a clump of four pines." Grisez stopped and peered through the darkening woods. The August evening was hot and still. A hermit thrush sang a lilting, changful song. "There it is." Grisez eased downslope through a thick stand of second growth oaks. The Pennsylvania champion devil's-walkingstick stands 35 feet tall. Its circumference is 1 foot 8 inches. These measurements, together with the 17-foot crown spread, give it a total of 59 points on the universally accepted American Forestry Association's rating scale: one point for each foot of height and one point for each inch of girth, plus one point for every four feet of crown spread. Grisez's champion white pine scores 335 points. We had gone, it seemed, from the sublime to the ridiculous.

If the devil's-walkingstick appeared unprepossessing to me, it must not have to Grisez. Laying his hand rather gingerly on its spiny trunk, he looked up into its wizened, twisted branches, then glanced around at the vigorous young oaks beginning to hem the champion in. "It hasn't been overtopped yet," he murmured. He spotted a grapevine snaking up an adjacent oak, reaching its tendrils across into the walkingstick's crown. "I really should cut this." The grapevine, he explained, would ultimately blanket the walkingstick's leaves, shading out the sun. Grisez got out a pocketknife and severed the threatening vine.

The next morning found us riding in Grisez's aluminum canoe down the Allegheny River. We had put in at the



**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by **GAME NEWS** readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from **GAME NEWS** office.



Buckaloons Recreation Area of the Allegheny National Forest, where Grisez had shown me his champion bitternut hickory: a thick, lofty specimen, leaning slightly away from the vertical, its limbs flexing up and out, its thousands of pale-green leaves whispering and shimmering in the breeze. Now we would search for his champion speckled alder, which Grisez believed he would have trouble finding. The speckled alder grew on Thompsons Island, in the river. "It's a big island," he said, "and a little tree."

The Allegheny carried us down its green corridor, lined with sycamores, silver maples, basswood. In places, cottages appeared beneath the trees. A kingfisher rattled, a heron squawked; mergansers floated in the shallows. I asked Grisez why he hunts for big trees.

He smiled his shy smile, dipped his paddle. "People like to set records," he said. "Maybe that's my motive." His eyes searched the riverbank. "Records attract attention. If a person finds a record tree, he'll keep an eye on it, protect it. If a landowner knows there's a record tree growing on his property, maybe he won't log it off." Grisez belongs to the Western Pennsylvania Conservancy, the Western Pennsylvania Botanical Society, and the Northern Allegheny Conservation Asso-

ciation, a local group that was instrumental in persuading National Forge Company of Warren not to log 70 acres of big timber on the old Newbold Estate, which we were just then floating past.

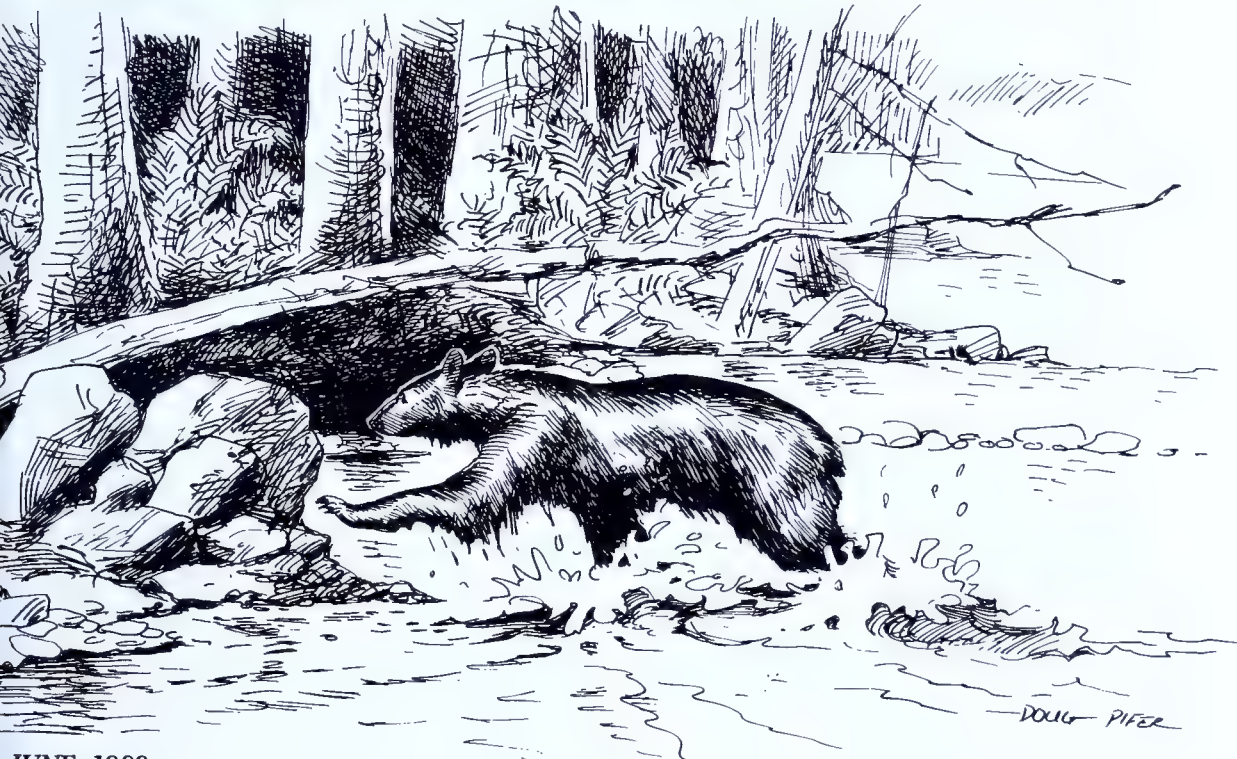
"What's that?" Grisez whispered suddenly, staring downriver. "Looks bigger than a beaver."

### A Bear

It was a bear. The bear was swimming across the Allegheny. It swam like a dog, its head tilted up and out of the water, and it grew larger as the current carried us toward it. The bear got out on the west bank, black and skinny and streaming. A second bear followed the first; aware of us, it swam faster, reaching the shallows and lunging through them, making the transition from water to woods in a sudden, clattering splash. Both bears disappeared into the fastness of the Newbold Estate.

The river was bathwater warm, and opened shells of mussels lay among the pebbles like heavy, encrusted butterflies. We pulled the canoe onto the bank of Thompsons Island and started off.

The island bore no sign of humans. Plumes of ostrich fern enveloped us, and weeds and grasses grew higher than



our heads; the hothouse smell of growing vegetation was everywhere. Towering above the undergrowth were many tall trees: ash, butternut, black walnut, slippery elm. "My black maple—the first state champion for that tree—is on this island," Grisez said. "It was bested by another tree in 1985. Now it's just a big apartment house for raccoons."

We continued on. My shirt stuck to my back, and deerflies buzzed around my head. "Now where could that speckled alder be?" With the palm of his hand, Grisez wiped his brow. He set off again on a slightly altered course.

Suddenly he stopped and lifted up his eyes. "Yeesh," he said, "Could that be a hackberry?"

A big, big tree.

"It's a hackberry, all right," Grisez said. He got out his tape measure and stretched it around the trunk. "One twenty-five. Could you write that down, please?"

He uncased his clinometer, a small gray instrument, and backed off 100 feet. He sighted the device on the top of the tree's crown, then on the base of its trunk. The clinometer compares slope to known distance—in this case 100 feet—to reveal height. "Ninety-one," Grisez said.

The tree seemed poised above us. It was not a familiar type to me. The thick dark branches interwove with one another. The leaves, flickering faintly in a breeze that did not exist on the ground, were too far up to be seen clearly. Perhaps it was the warty bark, or the rounded crown, or the bottomland site, or all of these, that had let Grisez identify the hackberry so quickly. The hack-

berry grows as far west as Oklahoma, south to northern Georgia. Its wood is used for furniture, athletic goods, plywood, boxes and crates. About eight stories up in the crown of the Thompsons Island hackberry, a small bird fluttered. It darted in one direction, then another, catching insects.

Grisez had a quaver to his voice. "If you would, go stand under the outer edge of the crown, keeping your shoulders in line with the trunk." He handed me the end of the tape. Fighting the undergrowth, we measured the crown's longest dimension, then its shortest, and averaged the two: 56 feet.

91 plus 125 plus 14. Total, 230 points.

"That's a really big tree," I said.

Grisez nodded, then shrugged faintly. "I'm pretty sure there's a bigger one in somebody's yard in Philadelphia." Indeed, the record book stated that the champion hackberry, 328 points, stood on the corner of East Ashbridge and North Franklin streets, in West Chester, 30 miles from the City of Brotherly Love.

"Now for that speckled alder," Grisez said, turning and setting off through the brush.

We never found it. We located a stand of speckled alders, twisted gnarled, low-growing trees on the verge of being shaded out by basswoods. Perhaps the champion was that moss-covered log lying rotting on the ground. We chose the biggest speckled alder and measured it: 49 points. The old champion scored 55.

(This, the first of a two-part article, originally appeared in *Country Journal* magazine.)

ATTENTION, sportsmen: if you had a deer or bear measured last April at our Southwest or Northwest Region office during our scoring sessions, and your trophy met or exceeded the following minimum scores, please contact the appropriate region office at 1-800-243-8519 or 1-800-533-6764, respectively; we need your address for record keeping purposes. Typical deer with firearm, 140; non-typical deer with firearm, 160; typical deer, archery, 115; non-typical deer, archery, 135; typical deer, pickup, 140; non-typical deer, pickup, 160; and bear, firearm or pickup, 16.





**ROVING**, the practice of shooting at targets of opportunity—beverage cans, plastic bottles and other assorted junk—is a great way for an archer to sharpen his shooting eye and clean the environment, too.

**Recreation and recycling . . .**

## ROVING

**By Keith C. Schuyler**

A-roving! Oh, who will go a-roving,  
To sight a target in the mead,  
To watch the feathered missile speed  
And quiver like a plumed reed  
To draw you on a-roving  
A-roving, a-roving.  
Across the hills a-roving till  
daylight dies.

**W**RITTEN ON November 23, 1919, the above is the first stanza from a poem by Mark H. C. Spiers that may not even have a name. It pertains to that ancient archery sport sometimes known today as “stump shooting.” In this in-

stance, the word *mead* is interpreted as *meadow*.

Dr. Robert Elmer, in his 1926 book, *ARCHERY*, calls the practice of shooting at targets of opportunity, *rovers*. Both *roving* and *rovers* are synonymous, but in the game, or practice, such targets are technically also called *rovers*. *Rovers* are also people or creatures that wander all over the place. Hence, the onetime popularity of the name *Rover* for dogs.

Roving with the bow is akin to plinking with a rimfire. In fact, the latter practice may have been picked up when firearms replaced the bow before its



modern resurgence as a target and hunting arm. Although roving was a game played by young Indians as they practiced their skills with the bow and arrow, on the way to manhood and more serious applications, it is believed to have originated in England. For the most part, ancient archers did not have ready access to formalized shooting, although the time came when it was necessary to practice with the bow for military purposes.

### Relevancy

Now that we have all the history pinned down, what is the relevancy in modern archery to the game of yore?

You don't hear much about roving any more, but perhaps you are missing an off-season chance to improve your field shooting and hunting success, as well as having a lot of fun in informal competi-

tion. Furthermore, if you are so inclined, you can do your bit for cleaning up litter and recycling. There are, unfortunately, no shortage of targets scattered through the woods and uncultivated fields. Beverage cans, plastic bottles and assorted junk are all too evident, even in the more remote areas along trails, streams and old logging roads. By carrying a knapsack, pack basket or other carrier, you can do the scenery and the landowner a favor by gathering litter as you go. A plastic liner, such as a garbage bag, will protect your containers from dirt and moisture.

There are plenty of natural targets, too, such as stumps, dead saplings and even leaves that offer particular challenges. Presumably, all these tempters are at unknown distances, which is a far cry from most regulated field and target games. Although roving can be practiced at any time of year, the likely possibility of losing arrows eliminates times when there is more than a light frosting of snow. It is tough enough finding arrows after they skip under leaves or grass when "target" visibility is optimum. Don't tempt yourself by taking

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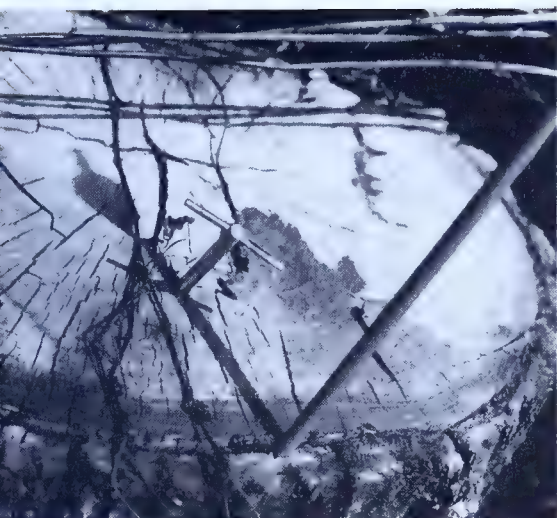
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**ROEVER MATT KLINE, right, literally bags a tin can. Note the inexpensive arrows he uses for the activity. Also, an arrowhead puller, above, is often a big help in removing stuck heads.**

any of your best arrows with you. It can make roving expensive.

By whatever name it was known, and before more formal shooting was developed by organized archery, roving was a fairly popular pastime in this country when crossbows, longbows and recurves were the only means of shooting arrows. Also, wooden, and even fiberglass shafts, were inexpensive compared to today's exacting aluminum. Leftovers from matched sets were expendable for roving, even though odd lengths and tattered fletching impacted somewhat unfavorably. You may still have enough old arrows around to fit the old recurve for what might be a nostalgic combination. Whatever causal target is randomly chosen, there will surely be times when rocks and other natural debris will damage your arrows.

One source of junk shafts is the arrow keg or box kept at most archery clubs, where arrows found on the range are deposited, usually so shooters can retrieve their lost arrows. Of course, the purpose is to make such arrows available to the rightful owner, but many remain unclaimed for years, lost by visitors or those who are no longer associated with the club. For a modest amount, clubs should be willing to part with those. A little elbow action and sometimes new fletching can often re-



store them sufficiently for roving, but they must be of proper length and weight. Don't be tempted to use shafts that show hairline cracks or other dangerous imperfections.

From a practical standpoint, it is best to use the same bow that you rely on for hunting. Although you are out primarily for fun, there is still the goal of sharpening both your eye and your general shooting performance for the more serious business of the big and small game seasons. The challenge is even greater than on regulated field courses because each shot is taken from a different stance and no cutting has been done to clear the path from arrow to target.

### Consequently

Today's more popular arrows, regardless of their construction, generally have heads that can be unscrewed from the insert. Consequently, those that penetrate too deeply into logs or stumps can have the shafts retrieved simply by untwisting them until they clear the heads. If the heads are not embedded too deeply, an arrowhead puller can be affixed which, by careful maneuvering, can be used to free them. For arrowheads that won't permit easy removal



**WATER SHOTS** provide especially challenging shooting opportunities, particularly for the archer who "earns" the right to retrieve the arrows.

intact by hand, but are not too deeply stuck, a pair of pliers may be used. This is next to a necessity with old heads without a threaded insert. Too often an attempt to pull the arrows free by hand results in broken or bent shafts.

Selection of arrowheads for such she-nanigans are usually limited to blunts or field points because of the rough usage to which they are likely to be subjected. Old 32 or 38 handgun cases may be fitted to wooden shafts and serve as blunts, which will largely eliminate the need to extract them from wooden targets and, in addition, save shafts.

### Follow the Leader

Roving can be a satisfying solo experience, but having one or more companions can greatly increase the enjoyment by encouraging a bit of competition. We used to play a game of follow the leader. After drawing straws to determine who would shoot first, whoever was named leader could pick any target of his choice. Further, he could choose the position from which each had to shoot. Some fiendish situations developed, such as shooting between close trees, under or over bushes, kneeling, shots on water, etc. Uphill or downhill shots further challenged the shooters. The archer who hit, or came closest, could then take the lead. To encourage good

shooting, whoever shot farthest from the target was required to retrieve all arrows. You can discourage the leader from choosing next to impossible shots, or those that are hazardous to the arrows, by designating him arrow puller if he misses.

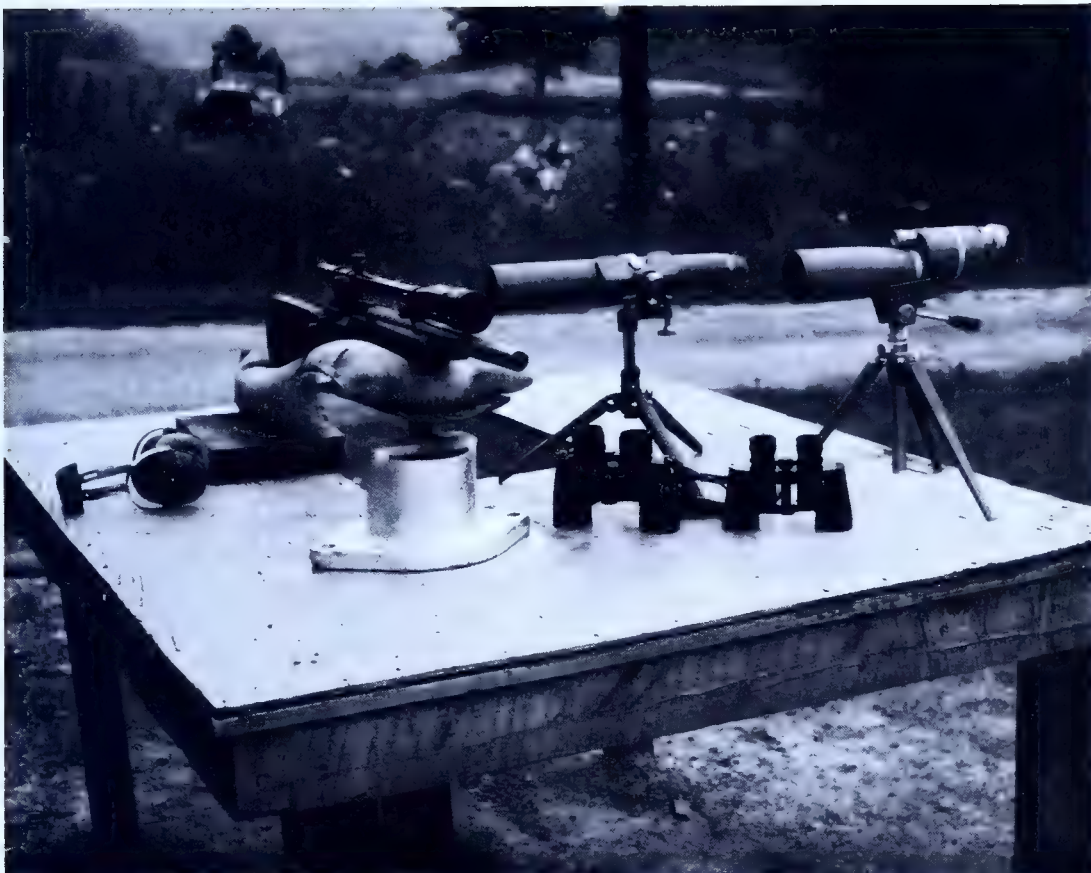
Shooting over water can be special sport. A thrown stick or an errant leaf can be used as a target on either still or running water. Arrow retrieval can become more significant for whomever has the chore, depending upon water depth and distance from shore. This phase is definitely not recommended for other than warm months.

Although it seems a natural outcome wherever the bow has been used, there is considerable conjecture that archery field courses were an evolution of the English roving sport. In ARCHERY, Dr. Elmer tells of an established course not far from the Tower of London's northern shadow, which was first mentioned in 1590. At one time there were up to 164 marks at which to shoot. Presumably, each had an adjacent target of some sort. There were no hazards. Rather, the courses were simply to encourage good shooting and at considerable distances. The more serious implications concerned improved ability for military purposes. Shooting at the "king's deer" was discouraged by penalties that at times included death for the guilty.

One note of caution is in order. Because this is a fun game, and no formal rules exist, there might be a tendency toward carelessness. Need for safety never changes, regardless of the activity. The same might be said for the need to find any excuse for practice with the bow and arrow.

Roving is one, and it knows no seasons.





**RIFLE SCOPES**, spotting scopes and binoculars are tremendous aids to shooters, and over the past decade or so all shooting optics have reached a high degree of optical excellence.

## The Hunter's Optics

By Don Lewis

Photos by Helen Lewis

**S**OON AFTER I built a benchrest in the 1950s, it became obvious that I needed extra magnifying power to see the bullet holes in the 100-yard target. A friend loaned me a vintage brass draw tube 44x telescope. I thought I was all set with that much power, but because there was no tripod, I found it impossible to hold steady. I improvised a stand for it, but 44 power offers a very small field of view and, on bright days or evenings everything appeared so blurred and hazy I could barely see the target let alone the holes. Later, I used a high magnification target scope, but it wasn't satisfactory either. Eventually I bought a Herter's 15-60x spotting scope with separate eyepieces. I used it for five

years or more, but it was rare for me to use powers above 20x. For the last 25 years I've done much of my shooting at night, at my lighted range, but still stick with powers below 25x.

When I purchased the Herter's spotting scope I fully intended to use the higher powers. In fact, the two reasons for selecting the Herter's were that it was within my price range and that it offered a 60-power eyepiece. Even though I'd had difficulty using the battered 44x telescope, I attributed that to the internal mechanics of the old scope. I was certain the image would be sharp and clear in the higher power ranges of a brand new scope.

Obviously, I was then unaware of the



demon known as mirage. I failed to realize that everything between my eye and the target was magnified. Although the old telescope was optically poor, it was the high magnification that caused the blurring of the target. I learned this to my sorrow when I set up the new Herter's on a bright sunny evening, complete with the 40x eyepiece. Thinking that everything would be bright and clear in the new scope, I was surprised to find that the target was not sharp, that it was just as blurred as with the 44x telescope. It began to sink in that high power is no guarantee of better visibility. Dropping to the 30x eyepiece was a step in the right direction, but it was the 15 power eyepiece that placed a clean sharp image in my eye.

Since those early days I have been introduced to quite a few brands and models of spotting scopes. During the past ten years, all shooting optics have reached a higher degree of optical excellence. This is apparent in Bushnell's new 15-45x Zoom Spacemaster II. This scope's 70 millimeter objective lens en-

**A SPOTTING SCOPE can save a lot of leg work on the target range, but thinking that higher powers are best is often a mistake. Low powers have wider fields of view and often give clearer images.**

sures more than sufficient light transmission and image brightness. Comparing it with the old Herter's, it's apparent the new Bushnell Spacemaster gives a much clearer image. Unquestionably, this is due to the higher quality of craftsmanship and optical excellence in the more expensive Bushnell product.

Another interesting feature is a built-in "peep" sight above the eyepiece. Find the target in the peep sight, and the Spacemaster II is dead on target. As most outdoor fans who use spotting scopes for hunting or bird watching know, it is not always easy to locate a small target through a spotting scope, because of the narrow field of view. The peep sight eliminates this frustration.

A compact binocular is a smart buy for the big game hunter. For decades, hunters have carried bulky binoculars that were not only cumbersome, but also heavy. Years ago I used an ex-military pair of binoculars in the pasture fields and also for deer hunting. The bulk and weight weren't much of a problem on summer hunts, which don't require much walking, but it was a different story during deer season. The weight was bad enough, but the way they bounced around when I walked was very irritating. In cold weather I stuffed them under my coat, but again, their bulk made the coat hard to zip or button. I finally quit carrying them.

The picture really brightened, though, when the compacts came along. I had good success in the squirrel woods with a set of 7x26 Bushnell Compact binoculars. Like all binoculars, though, the Compact was susceptible to rain and snow, but it was small enough to fit in the breast pocket of my hunting coat. For several years I have been using Bausch & Lomb 7x24 Armored binoculars that are waterproof. At 17 ounces, they are a little heavier than conventional compacts, but they are much





**LINCOLN LONGSTAFF** has a 36x Leupold mounted atop his custom built 6mmPPC bench rifle. This arrangement for benchrest shooting is capable of one-hole accuracy at 100 yards, but would be unsuitable for most hunting purposes.

more durable. Helen switched from a set of 7x42 Swarovski Habicht SL glasses to Bushnell's 8x21 Folding Armored binoculars. They weigh less than 8 ounces, and will easily fit into a shirt pocket. With the roof prism compacts now on the market, the day of the bulky, heavy binocular in the deer woods can be over.

The power factor is still a problem for many hunters. I can understand why it's easy to think that the more powerful an optic, the brighter and sharper a deer or woodchuck will appear. We use magnifying glasses to examine small, close objects, so it's reasonable to assume our eyes could benefit from extra power in our shooting optics. To a certain extent that is true. Our eyes do benefit from the right amount of power. But too much power is as bad as no power at all. My experiences with spotting scopes proved that going all out for power is often the wrong approach.

Last summer I was hunting wood-



chucks with a friend who had little knowledge about scopes. He was using my Remington 700 heavy barrel 22-250 topped with a 6-24x Bausch & Lomb scope. It was a very bright afternoon, and my friend spotted a chuck about 250 yards away. I asked him what power he thought would be best for the long shot. After taking a second look through his binoculars he said, "All the power you can crank up on the scope." I turned the eyepiece to 24x and handed him a cartridge. Closing the bolt quietly, he

## GAMEcooking Tips

### Dot's Venison and Sausage Casserole

- 1 pound venison sausage
- 1 pound venison cubes, well trimmed
- 1 large onion
- 2 medium garlic cloves, minced
- 2 medium green peppers, sliced
- 4 medium potatoes, peeled and diced
- 1 can kidney beans, drained
- 1 teaspoon basil
- 1/2 teaspoon salt
- 1/4 teaspoon pepper
- 2 beef bouillon cubes dissolved in 1 cup water

Brown sausage in heavy skillet over medium heat. Cut into bite size chunks and place in a 3 quart casserole. Drain

all but 2 tablespoons of fat from the pan and brown the venison cubes. Place them in the casserole on top of sausage. Cook onions and garlic in the same pan until tender. Add the green peppers and cook 1 minute longer. Add these ingredients to the browned venison. Add the raw potatoes and kidney beans. Sprinkle with basil, salt and pepper. Pour the dissolved bouillon cubes over. Bake at 350 degrees 1 hour and 15 minutes or until venison cubes and potatoes are tender. Serves 4-6

— FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY



THE WHITE-TAILED DEER is the eighth species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for non-game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patches of the snowy egret, bluebird, bobcat, kestrel and elk are still available: those of the osprey and river otter are sold out. Decals (\$1 each) are available for all but the egret and deer. Order from the Game Commission, Department AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.

settled the rifle on the rest and looked through the scope. Twenty seconds later he was still twisting and turning his head in an attempt to find the chuck.

"You aren't having trouble seeing through the scope?" I asked. "At 24-power, the chuck should look like a grizzly bear."

"I can't find the chuck, and everything seems blurred," he answered. "Is this scope as good as you claim?"

### Made A Difference

Without answering, I told him to set the scope on 8x and see if it made a difference. It did. He found the chuck instantly, but before he took the shot, I asked him to gradually increase the power until he felt he had too much. After some back and forth adjustments he looked at the eyepiece and told me it was set on 14x. He cranked the scope down to 10x and connected on the chuck.

As we walked to the hole my friend admitted that he had felt a woodchuck hunter would want as much power in a

scope as he could get. In fact, he said, he used to wonder why a varmint hunter would want a wide range variable scope because he couldn't imagine how the lower range of powers would be of any value in the chuck pastures. Later in the day a haze filled the evening air, and he learned that not only bright sunlight made the higher powers difficult to use, but that the evening haze caused similar problems.

Does this mean that scopes such as the 6-18x Redfield, 6.5-20x Leupold and 6-24x Bausch & Lomb are not for the chuck hunter? Not at all. Any one of those scopes is a wise choice for the varmint hunter. And there are times when the higher range of powers will be used in the field, but the real benefits of high magnification come on the target range. I normally use up to 12-power in the pasture fields, but go above 15x when sighting in. Another fine entry for a varmint fan is the 4-12x, and it will usually do an impressive job in the deer woods.

A good choice in a combination scope is the 2½-10x Balvar Bausch & Lomb. It's about 13½ inches long, weighs a mite over one pound, and has a 40mm objective lens. I'm fully aware that large objective (front) lenses are currently in vogue, but I have serious doubts if they are really needed on many varmint outfits. Unlike some states, those that have no shooting hour restrictions, Pennsylvania does not permit woodchuck or big game hunting after sunset. Therefore, having a large objective lens strictly for gathering light in late evening is not needed. Some larger objective lenses are being offered today, and this light gathering feature is stressed. Also, the extra large objective lens may require special mounts, and that makes switching scopes from one rifle to another much more difficult. I'm not condemning the extra large objective lens, but it shouldn't be the sole reason for buying a scope.

I do want to point out, in all fairness to the large objective lens, that it offers a brighter and sharper target when the afternoon shadows darken the woods. I



**DAVE WISE, Mechanicsburg, put an 18x Unertl on his Savage 112 chambered for the 220 Swift. Generally, a shooter should put the best scope he can afford on his rifle because such expenditures are normally lifetime investments.**

conducted some quick tests with several new scopes, each carrying a 44mm or larger objective lens, and there is a difference when it comes to looking through haze and shadows.

The marketplace is filled with a wide variety of hunting optics. The claims and warranties are impressive. While it all sounds good, it can be confusing and somewhat misleading. For example, a friend's inexpensive variable carrying a lifetime guarantee failed during its second hunting season. The guarantee was good, and the scope was repaired, but the owner waited three months before it was returned.

Any scope can fail, but there is less likelihood of a top quality scope failing than a bargain priced outfit. When purchasing a scope, ask about getting a replacement if a failure occurs. Some manufacturers and dealers offer a free replacement, if the scope actually fails from a manufacturing or material defect.

Helen has used a 2-7x Redfield Wide-field on her LSA 25-06 for eight years without a problem. I think it will last many more years. But it has been bumped, jarred and soaked with rain



and snow many times, so to play it safe I intend to take advantage of Redfield's tune-up offer on scopes made after 1967, in which they'll clean, adjust, re-gas, replace O-rings and seal the scope. For only a few dollars, Helen's scope will be as good as new. Don't overlook the old ounce-of-prevention adage.

A good rifle deserves a good scope. A good rifle is no better than its sighting arrangement. That's why it's important to put the best scope you can on your rifle. An accurate rifle with a top quality scope makes an unbeatable combination. On top of that, it's an investment that will last a lifetime—and that's always worth considering.

## Cover Painting by Marie Girio Brummett

Many people still believe raccoons must wash their food before eating it, because of their habit of dunking food in water. Research has shown, however, that raccoons are fully able to digest food without washing it, that the habit is just a behavioral trait related to the way they poke and probe along banks and under submerged rocks, roots and logs for fish, crustaceans, amphibians and other food stuffs. The raccoon is one of Pennsylvania's most important furbearers. In recent years annual harvests have been running more than 400,000, and about 80 to 85 percent is taken by hunters, with trappers accounting for the remainder. This month finds young raccoons leaving their dens and exploring the outside world with their mothers. Family groups remain together until at least the fall and possibly much longer. Although no young animals should be handled, it's especially important to leave raccoons alone because of the current rabies epidemic in the state.

# In the wind

bob mitchell



The largest fine in the history of Canadian wildlife law enforcement was levied against an outfitter for smuggling polar bear skins and other marine animals into the United States. Found guilty on four counts of violating the Export and Import Act, the president of the outfitting company was fined \$70,000.

Last winter eight Alaskan trappers helped personnel from the State University of New York live trap lynx. The group hoped to obtain 12 animals, take them to New York and release them in Adirondack Park. Lynx have been absent from the Empire State for 100 years.

Last year Michigan and Minnesota became the first two states to exceed goals for nesting bald eagles set by the Northern States Bald Eagle Recovery Team. The goals for the two states were, respectively, 140 and 300 nests, but the actual numbers were 161 and 372. The goal for Pennsylvania, which is included among the 24 states covered by the Recovery Team, is ten, and we had five nests here last year.

The North Carolina Wildlife Resources Commission has established nine demonstration farms in the state to show farmers and other landowners how low cost but effective wildlife considerations can be incorporated into overall farming operations. The farms range from row crop operations and vegetable farms to cattle ranches and Christmas tree plantations. Protecting waterways, planting food strips, preserving mast and den trees, and tree and shrub plantings are some of the practices being promoted.

As reported by the Colorado Department of Natural Resources, it's been discovered that by combining plastic with about six percent corn starch, along with an oxidant, which can be corn oil, the resulting plastic product will decompose in six months to two years, not the 400 years it takes current trash bags and other plastic products to break down.

According to the Tennessee Wildlife Resources Agency, reports Boone & Crockett, a net yield of 60 pounds of sound acorns per acre is needed to sustain game populations consisting of one deer per 20 acres, one squirrel per 1.5 acres, one turkey per 50 acres, and one quail per five acres.

In 1984 the Kentucky Department of Fish and Wildlife Resources launched a ruffed grouse restoration project, in an effort to reestablish the game bird in the western two thirds of the state. Releases of 60 to 90 birds, live trapped from public grounds in eastern Kentucky, have been made at each of six sites. Realizing that only 25 percent of all grouse live to age two, biologists hope that by releasing such large numbers of birds at each site, enough will survive poor nesting conditions, harsh winters and predators to establish self-sustaining populations.



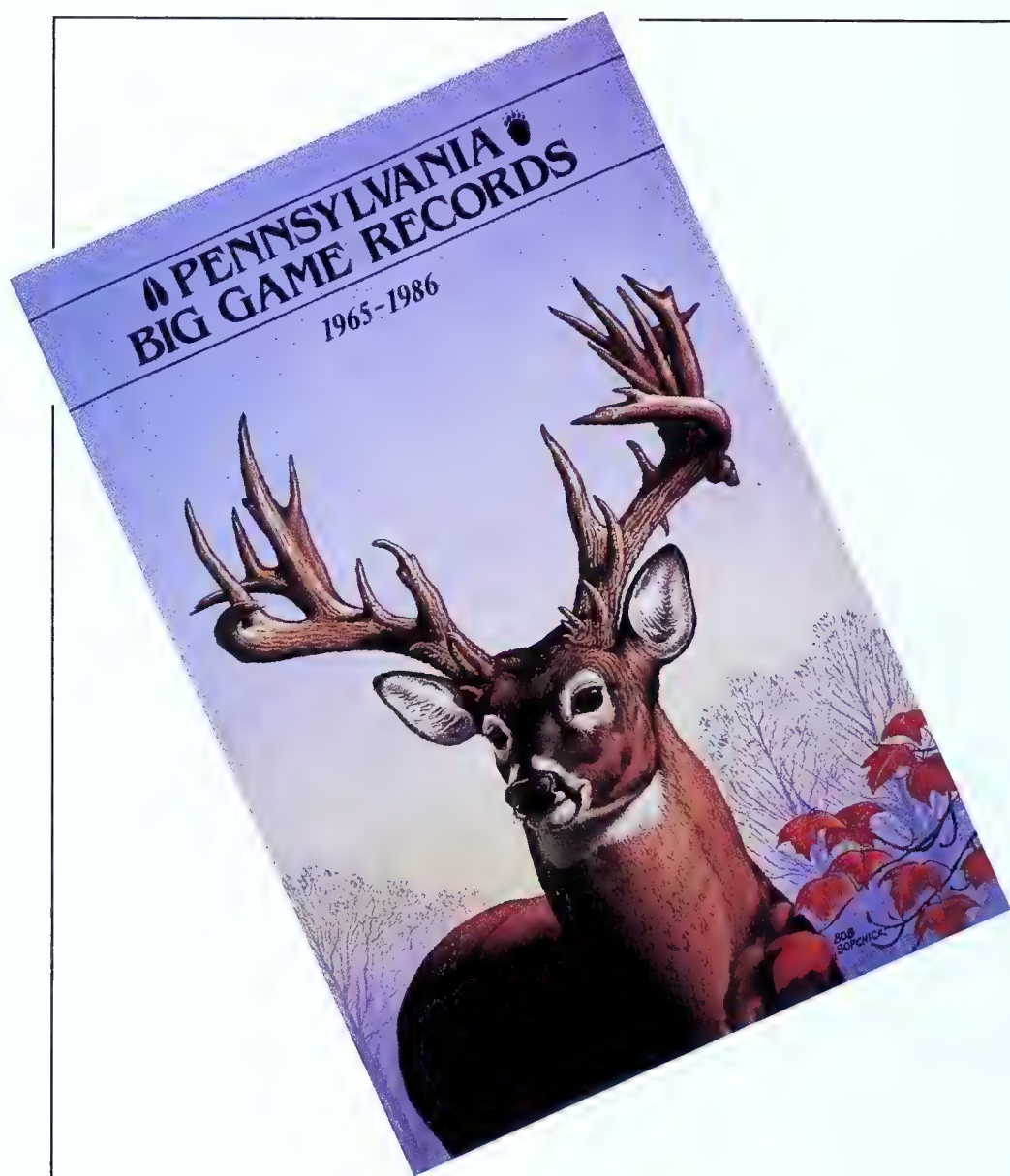
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*Last Glance*, by Jack Paluh, is the seventh limited edition fine art print available through the Game Commission's Working Together for Wildlife program. As with previous editions, *Last Glance* is limited to 600 signed and numbered prints. Image size is approximately 15 x 22½ inches, printed on acid-free 100 percent rag paper. Price is \$125, delivered; framed prints are an additional \$97.50. Limited numbers of 1986, 1987 and 1988 prints are still available. Order from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.



**Pennsylvania Big Game Records, 1965-1986,** features the state's official white-tailed deer and black bear records, plus dozens of stories and hundreds of photos related to the trophy hunts. Order this 237-page hardcover book from the Pennsylvania Game Commission, Dept. AR., 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Price is \$10, delivered.



# PENNSYLVANIA GAME NEWS

JULY 1989

ONE DOLLAR





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## Merger Report Released

The Legislative Budget and Finance Committee (LB&FC) recently completed its nine-month feasibility study on merging Pennsylvania's Game Commission and Fish Commission. The two-volume report covered potential financial savings, short and long term costs, areas where each agency could coordinate activities, and the results of various questionnaire surveys conducted by the committee.

Consolidating positions has long been held as a reason for combining the two agencies. But after a thorough study, it was reported that the vast majority of positions in the two agencies are so technical and specialized that consolidating positions would, at best, amount in annual savings of only one percent of the salary and benefit costs of the two agencies.

Other places for potential cost savings in the event of a merger include elimination of leases on Fish Commission buildings, motor vehicle fleet reductions, and consolidated purchasing of equipment.

On the other hand, costs of a merger would include \$2.6 to \$3.8 million to expand the Game Commission headquarters to accommodate Fish Commission staff; \$1 million to integrate the computer systems of the two agencies; several hundred thousand dollars to cross-train officers; and one-time relocation and merger implementation costs. And, as reported, these are costs neither agency can afford.

In addition to the financial considerations, the report also identified other potential positive and negative aspects. Coupled with a comprehensive management plan, increased outdoor recreation opportunities could be realized through a more integrated, multiple-use management approach on Game Commission and Fish Commission properties. That and increased flexibility and more expanded law enforcement coverage highlight the other possible benefits of a merger.

Among the negative effects are the loss of deputies unwilling or unable to voluntarily work during both the hunting and fishing seasons, and a decline in employee morale (which was the reason a merger in Illinois was reversed).

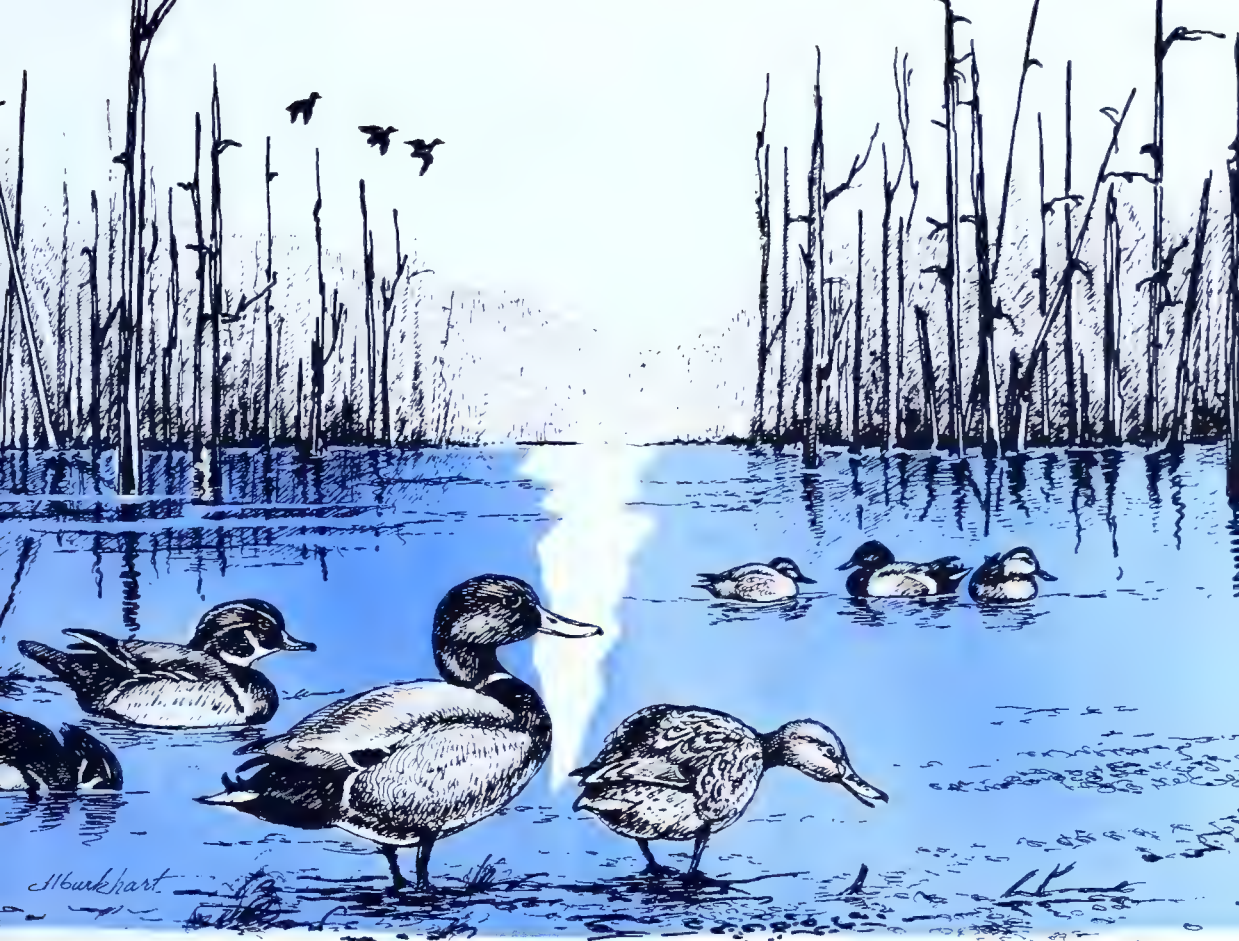
As part of their merger study, the LB&FC surveyed employees, deputies and commissioners of the two agencies; hunters, fishermen and boaters; and representatives of sportsmen's clubs. In essence, none of the groups indicated the legislature should consider merging the two agencies.

The Legislative Budget and Finance Committee explored every conceivable aspect associated with merging the two agencies. Benefits and drawbacks were identified and evaluated, yet there's been no indication the advantages gained would outweigh the costs such a merger would entail. Nor does there seem to be much support for combining the two agencies.

Game Commission and Fish Commission law enforcement officers have historically worked together, and steps have already been taken to make such cooperation more widespread. In addition, once completed, the Game Commission's new radio network will enable Game Commission, Fish Commission and State Police officers to communicate directly to one another, which will just further enhance efficiency and cooperation.

Maybe this entire issue was best summarized in a passage from the report in which the opinions of natural resource professionals from outside Pennsylvania were summarized. "While often citing perceived disadvantages of separate fish and game agencies, those who submitted input to the LB&FC staff frequently expressed opinions that Pennsylvania has attained a national reputation and leadership role for professional fish and wildlife programs and management under the separate independent agency structure." — *Bob Mitchell*





**SOME OF** Pennsylvania's many flood control reservoirs built and operated by the U.S. Army Corps of Engineers harbor both resident and migrating flocks of waterfowl, and they often aren't besieged by armies of hunters.

## Ducks of the Corps

By Jeff Knapp

**D**UCK HUNTING, public hunting areas and hunting pressure. Over the years much has been written about the combination of those three subjects. Basically, the various articles told us: If you have a little of the first two items you'll end up with plenty of the third.

The problem of duck hunting on public grounds has been well documented. Multitudes of hunters, too few ducks, and skyblasters are just a few things we have all read about and probably experienced. We've been told that ways to avoid these problems are to avoid opening days, weekends and holidays. That's fine, unless your precious hunting time only falls on openers, weekends and holidays. The physical effort of paddling

into the marsh farther than others is frequently offset by the fact that these areas are often sprinkled with several access points. As you paddle away from the launch to get away from the crowds you start meeting guys coming from the opposite direction, they, too, trying to escape the throngs.

### Flood Control Reservoirs

Now, wouldn't it be nice to hear of some areas that are open to public hunting, harbor both resident and migrating flocks of waterfowl, and aren't besieged by armies of shooters? Such places do exist. They are some of Pennsylvania's many flood control reservoirs built and operated by the U.S. Army Corps of En-

gineers. Over the past few seasons I have sampled the hunting opportunities on several of these projects, and at times have actually wished for more hunters.

What exactly is a flood control reservoir? Primarily it's an impoundment designed to hold or store water during periods of extended heavy rainfall. Water can then be released later in a controlled manner to prevent downstream flooding. The projects I am most familiar with are on tributaries of the Allegheny River. By limiting the amount of water passed through the dam gates on these tributaries, the Corps is able to control the level of the main river itself. Flood control impoundments also exist on the Susquehanna, Delaware and Ohio River watersheds. The close proximity of some of these reservoirs to major waterfowl migration routes just enhances their attractiveness to ducks. Secondary uses of these lakes are recreation, irrigation, pollution abatement and, occasionally, hydroelectric power.

Don't start thinking all flood control reservoirs are secret duck hunting meccas. Some lakes, such as Shenango River Lake in Mercer County, are well known as waterfowling spots. Other lakes simply don't have the necessary habitat to attract and hold huntable populations. Herein lies the purpose of this article: to examine what type of reservoir has potential and under what conditions. I'll also mention the problems and solutions peculiar to this type of environment.

### Summer Pool, Winter Pool & Fall Drawdowns

Flood control reservoirs are maintained at different levels at various times of the year. During the summer the lake will be held in what is aptly named "Summer Pool." The pool will be kept at about this level, barring heavy rains, until some time in the fall. The Corps will then begin a drawdown process. The lake pool will be lowered to increase the capacity of the reservoir for the anticipated floods in the wet months to come. This lower level is known as "Winter Pool."

What does all this mean to the prospective duck hunter? Let's say it's mid-July and you're out bass fishing on one of these impoundments. You find that the flooded timber you are throwing a plastic worm into is also home to some wood ducks, and you make a mental note to try this spot in October. Beware! You may return to find what were once acres of flooded timber are now simply stands of dead trees sitting high and dry. What happened to all that great duck habitat? Fall drawdown.

Due to terrain differences, the physical characteristics of each impoundment will vary. These differences are very important to the hunter in that they directly affect when and how drawdown takes place. A large broad lake requires a longer period of time to lower than a small narrow one. A drawdown might be accomplished in a matter of days on one reservoir and take months on another. Also, some of the projects are designed to be lowered only a few feet, others 20 or more.

This variety of factors demands that extra effort be put into planning before you embark on a hunt. Once you become interested in a specific reservoir, contact the officials at that facility (see sidebar for more info) and ask for the following data:

1. Level of the Summer Pool
2. Level of the Winter Pool—These will be given in feet above sea level, and allow you to determine the exact amount, in feet, the lake will drop.
3. Date the fall drawdown normally begins.
4. Length of time it takes to complete the drawdown.

You may also inquire about waterfowl populations on the lake and the level of hunter activity. My own experience has shown Corps engineers and rangers to be extremely helpful.

Now, take this data and compare it to the hunting seasons for the zone in which your impoundment falls. With some luck, drawdown won't begin until



**PUDDLE DUCKS** supply most of the action, but one day we found some large flocks of buffleheads rafting near shore. By utilizing the lakeside cover we were able to get in on some fine jump and pass shooting.

after the season begins. This is especially important if you plan to hunt those resident wood ducks you spotted while bass fishing. If your research shows that a great deal of the project's water will be missing when you plan on doing the bulk of your hunting, don't give up. Another factor may become involved, which I'll get to later.

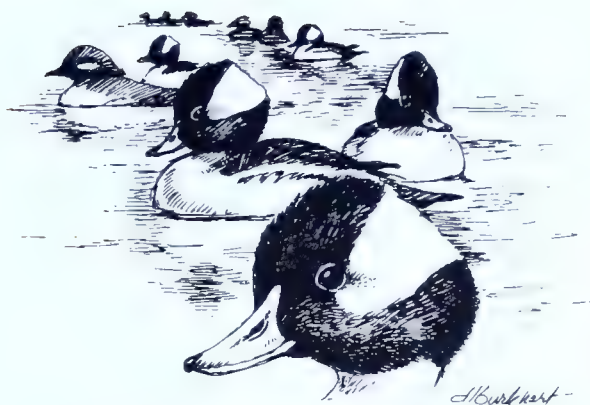
### Access

While planning your hunt, access becomes another important consideration. Remember, recreation is a secondary function of these areas. The level of services runs the full spectrum. On some reservoirs you may be lucky to find any type of launch area, while others offer paved ramps, and parking and camping areas. The more lavish facilities are often part of a county or state park that surrounds the lake itself. Here again, doing your homework will pay dividends. Find out if and when launch areas will be closed, whether or not they will be affected by drawdown, and if alternative access sites exist.

One of my favorite lakes has no launch facilities of any sort. Access is accomplished by carrying a canoe and all our gear a couple of hundred yards down (and back up at day's end) a natural gas company right-of-way. While getting in there is a bit tough, it means the number of hunters on the waterway are practically nil. Most people simply won't work that hard. (A note here: If you find yourself needing to use such an access point, find out the utility company's policy on these matters. Signs marking the presence of the line will often include the company's name and a phone number.)

In reviewing what's been discussed so far, the following prerequisites define a good candidate for a duck hunting/flood control reservoir:

1. Huntatable populations of ducks.
2. Suitable habitat still existing (not



drained from drawdown) during at least part of the season(s).

3. Some form of access.

### Habitat Created Via a Flood Control Operation

Earlier I alluded to a factor that could offset the drawdown of a reservoir. That factor is rain, and in the past several falls we've had plenty of it. November of 1985 went down as the wettest in history. When the torrential rains start falling, flood control projects start doing their thing—controlling floods. During a flood control operation, the act of backing up the pool for flood control purposes, the lake can increase tremendously and take on a whole new complexion. A reservoir that normally has little or no good habitat, or has lost it to drawdown, may now expand onto surrounding cultivated lands, creating acres of great feeding areas. Timbered flats that end up under water might offer ducks the security they desire in a resting spot.

As you might suspect, hunting impoundments under such conditions can be risky and frustrating. Water levels can rise and fall quickly. You may set up a blind at water's edge in the pre-dawn, only to find yourself standing in three feet of the wet stuff while you munch your sandwich at lunch time. The decoys that were sitting on water two feet deep might start looking like they're drowning as the rising waters pull them ever tighter on their tethers.

Planning and foresight become even more important. Keep in contact with the office of the facility you wish to

The Corps of Engineers has many good publications which are available upon request. One that provides general information on all the facilities in the state is entitled, "Lakeside Recreation in the Northeast." This pamphlet lists the facilities and indicates what services are available at each. It also has a map showing locations. Pamphlets are also available for many individual projects. They are of even greater value in that they list pool elevations and go into greater detail on the area's recreational potential. To obtain these pamphlets contact the Corps at the appropriate district office.

**Upper Ohio River and Allegheny River Watersheds:**

U.S. Army Engineer District,  
Pittsburgh  
1820 Federal Building  
100 Liberty Avenue  
Pittsburgh, PA 15222

**Susquehanna River Watershed:**

U.S. Army Engineer District,  
Baltimore  
P.O. Box 1715  
Baltimore, MD 21203

**Delaware River Watershed:**

U.S. Army Engineer District,  
Philadelphia  
U.S. Custom House  
Second and Chestnut Street  
Philadelphia, PA 19106

"Lakeside Recreation in the Northeast" should be available through any of these offices.

hunt. They can help you monitor the water level. After hunting the same reservoir at different levels you will be able to pattern the particular levels that are conducive to good habitat and hunting. Often it is the small—usually un-hunted—lake that offers the most from an influx of water that creates duck attracting areas. Do your research and legwork. Someday you will find yourself,

as I have, hunting on a body of water hundreds of acres in size that is the temporary home to hundreds of ducks and literally not another waterfowler within miles. At such times you may find yourself wishing for a few other strategically located groups of hunters around to keep the birds moving.

As with most waterfowling areas across the state, puddle ducks supply most of the action. My own experience has shown to expect woodies and a few mallards in the early season and mostly just mallards later on. Occasionally another species of puddler will spice up the bag. However, when an early freeze kept my hunting partner, Dave Keith and I off the marshes in Pymatuning's controlled duck hunting area we decided to try our luck at nearby Woodcock Creek Lake. We were pleasantly surprised to find some large flocks of buffleheads rafting near shore. By utilizing the lakeside cover we were able to get in on some jump and pass shooting at the flashy little diving ducks.

It would be inappropriate to discuss flood control reservoirs without a note on safety. These impoundments don't collect merely water and waterfowl. They also collect debris in the form of every imaginable kind of junk. Floating bottles and jugs, waterlogged timber just under the water's surface, and flooded brush all have the potential to turn a good adventure into a misadventure. When boating on these waters keep this in mind. Use common sense and follow all pertinent safety rules and precautions.

I purposely didn't mention many specific reservoirs by name. To do so would be similar to a woodcock hunter drawing you a map right to his favorite cover. I hope I've given you a guide by which you can discover your own hotspots. The planning and preparation can be extremely rewarding and are dimensions of a hunt most waterfowlers are familiar with.



# Farm Country Whitetails

By Mike Raykovicz

WHEN I started deer hunting, about 25 years ago, I was a young man who couldn't wait for opening day and the opportunity to tag a deer in the big woods of central Bradford County. To me, deer hunting meant going to Kellogg Mountain, posting along a ridge, and waiting for the opportunity to launch an arrow. At the time, I lived too far away from my preferred hunting area to do any preseason scouting, so deer hunting became largely a matter of luck. I now have the opportunity to hunt deer daily in an area that is a far cry from the rugged mountains that make up SGLs 12 and 36.

The land of western Susquehanna and eastern Bradford Counties is primarily agricultural. Farm fields adjoin small woodlots, which often meld into larger forested areas. I now have the opportunity to do a lot of preseason scouting and usually have several promising areas lined up prior to opening day. Over the years I have found that hunting farm country deer is much more exciting than hunting in the big woods.

Deer in vast forests can be anywhere there is food and cover. Therefore, preseason scouting is difficult. Acorns, beechnuts and other mast crops are often scattered over a large area, and the deer can cover a lot of territory looking for suitable food. On the other hand, deer in farm country tend to be fairly predictable in their behavior and in where they can be found.

In late August, when the nights first begin to feel cool and the first blush of scarlet touches the sumac, I begin to feel the restlessness that signifies the beginning of another archery season. By driving the back country roads just before dark, I generally discover deer as they begin coming out into fields. I watch through binoculars for the deer

to tell me which areas hold the most promise. By the first week in September, I usually pick a field where I have seen the largest number of deer. I sit in a spot far enough away so that I might get a good look at what deer activity is going on. Because deer seem to feel secure in these areas, I try to position myself where I can see the depressions in the field which are not visible from the road.

## Good Reason

In farm country, deer use a given field for good reason. Usually it's a new planting of alfalfa or other farm crop, which brings them in to feed. It is also likely that a well used field offers a readily available source of cover should escape become necessary. New plantings of farm crops, surrounded by areas of thick brush, offer ideal areas for the bowhunter to consider. When scouting, considerable deer sign may be found in some fields that are surrounded by little or no escape cover. To the novice, such areas may seem to offer excellent hunting prospects, but in fact, they are usually utilized by the deer long after dark. I avoid those areas and instead concentrate on those fields where I see deer before dark.

I always begin scouting a new area by walking the perimeter of the field in which I may want to hunt. I look for potential hunting spots in the woods surrounding the field. Ideally, I look for a food source inside the woodlot. Areas such as these usually have an apple tree or other preferred food somewhere in the woods. A spot like this is made in heaven. Deer on their way to the field to feed usually spend some time browsing along the forest or woodlot periphery prior to emerging in the field. Sassafras and other favorite deer foods are still







growing early in the archery season, and not many deer will pass up such foods to hurry into a field. These kinds of areas are particularly good for evening hunts. Before dark, and especially on rainy or windy days, deer generally begin their evening feeding in these wooded areas. If there are apples available, it's wise to try to find a stand nearby.

I try not to select a deciduous tree for a stand. Once the leaves fall, there is little cover to conceal any movement. It is difficult to pick up a bow and get off a shot without being detected. Believe me, deer do look up. They may not smell you, but they will often see you. I try to set up in a hemlock or other type of conifer. The thick branches of an evergreen cover up any hunter movement, and the many low branches make the tree easy to climb. If there are no apple trees in the woods, then I look for a spot where a well used trail enters the field from the woods. Just like people, deer don't like to work any harder than they have to, and to obtain food they normally take the most direct route from bedding to feeding areas. When selecting a stand near a used trail, I try to locate a trail leading from an area of cover to an area of food. Deer use various trails for different reasons, and a hunter watching an escape trail could spend many days and yet see nothing.

Other good areas to watch are woods bordering corn fields. Deer love field corn and at times do a significant amount of damage to this important farm crop. When asking landowner permission to hunt and use tree stands, I always ask where he may be experiencing crop damage. The farmer is always eager to tell me, and my scouting becomes that much easier. As with hunting the fields planted with other crops, hunting near corn fields requires the same tactics. Scout the woods surrounding the fields and place your stand in the woods, near the corn.

A number of years ago I thought I had an ideal location when I placed my stand near the edge of a corn field. The cover was perfect. Thick brush and woods surrounded the high corn. From



**THE WHITE-TAILED DEER** is the eighth species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for non-game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patches of the snowy egret, bluebird, bobcat, kestrel and elk are still available: those of the osprey and river otter are sold out. Decals (\$1 each) are available for all but the egret and deer. Order from the Game Commission, Department AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.

the sign it was clear deer were working this area every night. This spot looked so promising that I failed to consider that the land owner might harvest the corn. When I returned, I was shocked to find how barren a corn field looks after a chopper has done its work. Without the food source nearby, the deer quickly abandoned this particular part of the farm. Needless to say, I hastily searched for a new location.

Hunting farm country deer can be frustrating. Deer are often seen, but it is sometimes difficult to get near them. The problem is that many hunters often fail to identify deer patterns early enough. Some hunters stay anchored to an unproductive spot simply because it was a good spot last year. Maybe so, but things change. Deer patterns change from year to year, with the rotation of crops, availability of suitable cover, and a host of other reasons. As I said earlier, when I ask permission to hunt, I always ask the landowner if he is encountering crop damage from the deer and where most of the damage is occurring. I also ask where he is seeing deer and how

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## GAME NEWS

For a Friend . . .

many. This gives me an edge in my scouting. One of the greatest advantages of hunting farmland deer is what I am able to learn about deer behavior by watching them in their natural, undisturbed environment. I find that by the time hunting season approaches, I am quite accustomed to seeing both buck and doe and, therefore, more relaxed when one approaches my stand during the open season.

By mid-September I am ready to put up my tree stands in areas that I have received written permission. I usually have more than one in place prior to opening day. Normally I hunt from one stand for several evenings, in order to determine if the stand is going to be productive or not. If I see doe then I will stay with the spot to see if any bucks show up. Doe will usually move about

feeding before bucks appear, and will usually be seen before quitting time. Deer usually appear, feed, and then move into a field about an hour before dark. Early in the season and undisturbed by hunting pressure, the bucks usually follow the same general feeding routes as the doe. For this reason, I have not shot a doe with a bow and arrow for many years.

Sometimes, though, I think I'm too smart. Last year, for example, after receiving permission, I set up my stand in what I felt was the best location I had found in years. A spring frost had nipped most of the apple tree buds in our area, so it was rare to find an apple tree with any fruit. I had found a small area at the end of a pasture near the base of a mountain that had four apple trees all loaded with apples. As far as I was concerned, this was a "can't miss" spot. Looking over the sign, I carefully chose my spot. Opening day found me in my stand long before the sun came up, and it wasn't long before I saw movement about 40 yards away. I carefully raised my binoculars and was delighted to see a four-point contentedly munching apples. Instead of moving toward me however, he proceeded through the pasture and disappeared in the brush higher on the mountain. About a half hour later a spike buck fed beneath the same tree and followed the same path the four-point had taken up the hill. By ten o'clock I watched six more deer, all doe, do exactly the same thing. Clearly I had set up in the wrong spot. From all appearances, the spot in which I was located looked as promising as the spot where the deer had been feeding. Nevertheless, I decided to move my stand and take advantage of what I had seen.

Over the course of the next several weeks, there was hardly an evening that I did not have several deer within killing



**I TRY NOT to select a deciduous tree for a stand. Once the leaves fall, there is little cover to conceal any movement. Believe me, deer do look up. Therefore, I try to set up in a hemlock or other type of conifer.**



range. Trouble was, I did not see another buck for the remainder of the season. I was too stubborn to take a doe and wound up freezing myself on the last Saturday of gun season. What happened? The weather was particularly warm during the season, and it may have been that the bucks were simply taking longer than usual in following the doe to the food sources. Perhaps, the buck remained high on the mountain, feeding on beechnuts and other mast, and came to the lowland late at night. Who knows? I was certainly fooled by the activity of the doe. Looking back, I should have done some additional scouting during the season and possibly considered a different spot.

Bucks in the big woods of central Pennsylvania may be extremely wary of human encounters and move out of an area if they sense the presence of man. Farm country deer, however, seem more tolerant of man, simply because of the human activity in their home range. I have seen deer feed in a newly harvested corn field while the farmer and his field hand went about their business. The deer would run into the woods when the chopper came around and then come back out to feed after it had passed. I don't mean to imply that the hunter can get sloppy in his approach to his stand. Every effort must and should be made to approach the stand in a way which will leave a minimum of scent. I try to avoid walking to my stand through areas that the deer will likely travel. I attempt to avoid walking or crossing trails that are anywhere near my stand. Most action a buck takes is governed by his sense of smell. Bow hunting is difficult enough, and it doesn't pay to give the deer an advantage by arousing their suspicions. I usually check the direction of the wind and then try to approach my stand without having wind at my back. I don't think bucks were avoiding the area

of my treestand last year because they were suspicious. I think they were working another type or source of food. In any event, it's a sobering experience to come up empty once in a while.

Bow hunting in agricultural areas need not be a difficult task. It's important to remember that deer have to feed, and deer have to rest. The trick and the challenge is to deduce how they get to these feeding and resting areas, and to react accordingly. If you are not seeing deer on a regular basis, then be willing to move. The deer are feeding somewhere, and it's the wise hunter who seeks out these feeding areas. Sometimes deer activity does not occur until later at night and ceases very early in the morning. This causes a diminished number of deer sightings. For this reason I keep in close touch with several bow hunting friends. If they are not seeing deer either, then I stay put. If they are seeing deer and I am not, then I move to one of my other stands and hope my luck soon changes. Nothing is an absolute in deer hunting. I guess that's why I enjoy the sport. Find a suitable location, do your homework diligently, have respect for the wariness of your quarry and success can be yours. Usually!



**I HAD found a small area at the end of a pasture near the base of a mountain that had four apple trees all loaded with apples. As far as I was concerned, it was a "can't miss" spot.**



**IF YOU are responsible for taking away some wildlife cover, why not give a little back, just by neglecting some of your land? Let a small piece go to weeds. One cutting in August is all it takes to keep it in weeds and not brush and trees.**

## Weeds for Wildlife

**By Larry M. Lampietro**

**W**OULD YOU like to see more wildlife on your property? And by doing less work? Food and cover are necessary for all wildlife, and you can provide these ingredients on your property, simply by not cutting a section of your lawn, by not removing a brush pile, or by not cutting down that old rotted tree. Areas of thick cover are needed most during winter and spring. In winter, cover offers protection from the elements and predators, and an added food source. In spring, wild animals need cover for nesting.

Because of today's "modern" farming practices, wild areas, fencerows and fallow fields are quickly disappearing. And with hayfields being cut so many times a year, even they are no longer suitable for nesting. Also, a lot of former wildlife space has been taken over by homes, shopping centers, and industrial parks—all with acres and acres of manicured

lawns. If you are responsible for taking away some wildlife cover, why not give a little back, just by neglecting some of your land? Let a small piece go to weeds. One cutting in August is all it takes to keep it in weeds and not brush and trees.

Owners of building lots adjoining cornfields might consider planting or establishing strips of weeds along the property lines. Cornfields don't provide the winter food and nesting cover when rabbits, pheasants and other animals need it. They'll be nothing but stubble or fresh plowed fields. That strip of weeds, in addition to supplying cover, will not only produce a tremendous amount of seeds, but also a beautiful display of wildflowers as it is doing so. (Well, I think it's beautiful.)

If you own or are responsible for a large tract of manicured lawn, why not save yourself some time and money by



**IN ADDITION** to creating productive wildlife habitat, help protect the wild animals from unnatural predators—your cats and dogs. Keep them under control. Wildlife has enough to contend with without the constant harassment of family pets.

leaving an acre or two in weeds. I just can't understand why industrial parks, shopping centers and homes need so much lawn.

In conclusion, if you can talk your wife or your boss into following some of these suggestions—I know you're already convinced and that you've probably thought of it yourself anyway, last time you cut the grass—we will have many pockets of premium wildlife habitat. We will have saved ourselves some labor, some gas, and some wear and tear on machinery. Bird watchers will have also saved money by producing their own batch of seeds, complete with feeders (stalks). For those raspberry lovers, leave that strip or patch of weeds grow for two years. Chances are you will have a lush raspberry patch, courtesy of "The bird droppings planting system," and maybe some wild strawberries, too. And all for doing nothing.

For those of you who want to do more than nothing, and have some land to use, plant some of the seed mix the Game Commission sells, build some brush piles, make some clearings in the woods, and plant some conifers.



In addition to creating productive wildlife habitat, help protect the wild animals from unnatural predators—your cats and dogs. Keep them under control. Wildlife has enough to contend with while trying to survive the winter or raise a family in the spring without the constant harassment of a family pet.

We are all quick to blame somebody else for our shrinking wildlife populations (especially pheasants), but study after study shows shrinking wildlife populations are usually due to shrinking wildlife habitat. The Game Commission, with the help of various conservancies, such as the Lehigh Valley Conservancy, are buying as much land for wildlife as possible. So let's help them out. Give some of your land back to wildlife, just by doing nothing. The wildlife will do the rest.

### Cover Painting by Rod Arbogast

Many consider the goldens to be the most handsome of all retrievers—if not of all dogs—and they may have a point. The breed originated in England 120 or so years ago, when an Englishman purchased a group of dogs he saw perform at a circus. The dogs, which were a breed of large trackers used in Russia to guard sheep, were eventually crossed with bloodhounds, giving us the golden retrievers we know today. They were introduced to this continent around the turn of the century, and eventually became popular not only as retrievers, but also as good flushing dogs. Goldens are known for their intelligence, good looks, and calm disposition, and for being easy to train. For a hunter who wants a canine companion in the marshes and the uplands, and a nice house dog, too, the popular golden retriever is certainly worth considering.





Kellynn  
Ginsky-Barbolic



# The Best Week

By Diana S. Berger

WHEN I was asked to help with the muzzleloading program at the Potter County Conservation School, I accepted immediately, delighted at the prospect of going back to a place I remember so well. Though I had not been back in two years, I had spent four summers at the camp during my high school years, first as a student, then for three years as a counselor. Standing on the lodge porch this latest time, I found myself watching the scene for the first time as an uninvolved spectator. I studied the arriving students as they unloaded their gear. Most seemed unsure, a little worried, maybe, looking askance at the strangers with whom they would be spending the upcoming week. My cousin, in his first year as a counselor, flashed me a grin as he escorted the arriving students to their tents. I grinned back, wondering if the camp would influence his life as much as it had mine.

I first heard of the camp when I was a painfully shy eighth grader, unsure of everything except the deep love I had for the outdoors. The Potter camp is just one of many similar conservation camps set up in counties throughout the state. Just the shooting, hiking and canoeing were enough bait to cause me to go after the application like a deer after a field of buckwheat. The older kids discussed it in glowing terms, affectionately calling it "concentration camp." Nonetheless, I heard many describe it as "the best week I've ever had!"

As I approached my tent that first day as one of only two girls at camp, I knew the week would not be easy. Unrolling my sleeping bag on a cot, I looked out the back of the tent at the waving limbs of birch trees and the mountains around me, and I had a feeling it might just be worth it.

We were thrown in the deep end, so to speak, right from the start. We started

our camp experience that first night shooting trap. Shattering a couple of clay pigeons in front of all those boys started me on the long road to the self-confidence I gained during that memorable week. The shout of exhilaration by my best friend, who had never shot a gun before, when she broke a bird with that awesome 12 gauge, no doubt was a signal that the same thing was happening to her.

## Delighted Us

Everything about the place delighted us. The food, catered by a local restaurant, was delicious—although they could have served us about anything, for after our long days outside we were ravenous. Even the classes were teaching me something I actually wanted to learn; wildlife management and wilderness survival, not algebra and home economics, for example. I took copious notes, not only because it was a habit of mine, but also because a prize was to be awarded at the end of the week for the best notebook. It was amazing how we all became close friends after only two days of being together.

We played "Capture the Flag" in our free time, and survived a canoe collision while we were supposed to be getting our boating certification (actually we were surreptitiously having a race). One evening 21 students and three counselors, as well as some of the camp directors, stood around in awe as a Game Commission officer brought in something many people never see—a live bear. They tranquilized it right in front of us, and we cautiously touched the matted fur as the bruin was tagged, and we shivered as the mammoth animal growled low in its throat as a tooth was extracted so it could be aged.

Another day we were in the cold rushing current of Little Moore's Run well before nine o'clock, digging in the mud

for rocks to build retaining walls and a diversion ditch. We worked all day on the project, under the direction of Fish Commission officers (who were no doubt delighted to have our youthful muscles to put to work). Several mothers must have been horrified when their kids returned home with mud covered clothes. I know mine was. We ended the project by raucously dunking each other, as we were all wet anyway. But we each took pride in building a conservation project ourselves, by getting our hands and everything else dirty.

### Coon Hunting

One night we followed local coon hunters into the dark forests, and learned to recognize the voices of blue-tick hounds bawling “treed.” Some of us learned a few things about raccoons, too, that they don’t have white stripes, for example. On the nights we weren’t chasing coon hounds, there were tent raids, chicken fights, and mosquitoes, even a bonfire. All week the directors tantalized the more competitive among us with the “Outstanding Camper” award for the camper who did the best, overall, in everything.

For the first time I felt like I had found my niche in life. Not only was I having an incredible time, but I also found myself outgoing and friendly as never before. I was suddenly determined to win that prize. Unfortunately, there was another who was just as determined as I, and we raced for it all week, with students and staff guessing which of us would prevail. The deciding factor was a tree identification quiz, held at six o’clock in the morning. We had been drilled on the different types of trees, but as I peered through half-open eyes, wishing my tent mates and I had not stayed up whispering half the night, each trunk and leaf looked the same. I knew all the names, I just didn’t know which trees they went with. So I wrote them down in a likely looking order and headed for the showers. Later that day we received our graded quizzes, and I thought I had done quite well considering I knew virtually nothing about trees.

But it was two points lower than the highest grade. Needless to say, I missed the Outstanding Camper prize by those two points.

I did, however, receive the notebook award, and had no hard feelings toward my competitor, who had won fair and square. Besides, it was impossible to have any hard feelings after the best week of one’s life. I was sure the rest of life would be only an anticlimax after Conservation Camp.

Things soon began to look even brighter, however. Not only was I invited to attend the reputedly even *more* incredible state conservation camp—which is in itself a whole other story—but I also was asked to be a counselor at the next year’s county camp. Ecstatic, I considered it an honor second only to the high prize. I began preparing almost immediately for my return to conservation camp, this time as one of the staff.

Unfortunately, counselors have different perceptions of what makes camp fun. It was now up to me to prevent tent raids and chicken fights, make up the test questions, and make sure that canoe collisions (races) did not result in any damage or injury. I made sure no one snapped a bowstring without an arrow in it, kept the campers from using live trees in their bonfire, bandaged cuts and scrapes, and tried to help figure out what to do when a skunk got stuck in a window well. We had to stay up long after the students had gone to bed, correcting tests and making sure “lights out” was observed, only to be the first ones up each morning to roust the campers out of bed and have breakfast going. But all of those were just routine expected duties. The real clincher came when I realized I had to lead the orienteering hike!

I think the orienteering hike has been phased out these days due, no doubt, to the high cost of search parties and rescue helicopters. For those who remember it, however, it was a series of markers laid out across a seemingly untracked wilderness. The students were supposed to find one marker, follow the bearing on it to the next one, and so



ONE NIGHT we followed local coon hunters into the dark forests, and learned to recognize the voices of bluetick hounds bawling "treed." Some of us learned a few things about raccoons, too, that they don't have white stripes, for example.

forth. The trail was supposed to eventually lead back to camp. The precise use of map and compass had been carefully explained and understood, and it's very simple when practicing around a yard. It is a different thing altogether, though, when it comes to navigating in an unfamiliar forest. The students were usually gung-ho about the whole thing; I had loved it. Orienteering being an exacting science, however, and 12- and 13-year olds easily distracted, their enthusiasm normally did not last beyond the second or third marker. And this was usually because we could not find the second or third marker. That is where the counselor was supposed to come in and set the group back on course. This was not a great deal of fun, however, when the counselor herself had not the faintest idea where she was.

Over the three years I was along on the hike, I was fairly lucky. Once the reason we couldn't find the marker was because someone had forgotten to put it out. Although this presented some problems getting home, at least our pride did not suffer. The second year, all the groups missed the marker, and the entire camp ended up milling around helplessly in a field until someone stumbled upon it by accident. The third year I realized we had wandered off the right margin of the map, so we headed directly west through a mammoth blackberry patch. Painful, but effective. Some of my fellow counselors were not so lucky. One led her tired group in about dark, after they had followed a pipeline for miles and come out on a road well below camp.

Somehow, it was all worth it the morning the parents came to pick up their kids. The students said their sad good-byes to the friends they had grown so close to in the past week. Some of



them hugged me and affirmed, as I had, "It was the best week I ever had."

Watching the taillights disappear down the road, I smiled. They were right, but this was only a beginning. That one "best week" would lead into an entire lifetime of appreciation and love for the outdoors. There would be months and years of "the best times of their lives" that would, in a small way, have started here. In their own way, each of these kids would contribute to conserving our natural heritage.

I was thinking of this as I showed the student beside me how to put black powder in the pan of the flintlock. He was worried; he obviously was afraid to shoot this loud gun that belched flame and acrid smoke. I handed it to him and he lifted it to his thin shoulder, holding it in a shaky grasp. Screwing his face into an unreadable expression, he pulled the trigger. With a roar, the gun went off and the kid absorbed the recoil, without blinking an eye—perhaps because his eyes were closed.

He opened them and looked at me with a grin that stretched from ear to ear. "Hey, that was fun!" he exclaimed. "I wanna do it again!"

I'd like to do it all again, too.

But now it's their turn.



# The Deer

## The Elk

### Watched Over

By Robert J. Traveny

my car. Seeing the doe again, I began talking softly to her and moved in closer. I then noticed fresh elk tracks that hadn't been there on my way in. When I got within four feet of her she turned and, instead of disappearing in a flash, slowly walked off in the same direction the elk tracks were heading. I checked my camera and followed along.

After traveling about 50 yards I spotted the back of an elk only 40 feet away. As the doe walked up to it, the elk turned and faced me. It was a nice bull. As I was taking pictures, the doe walked over to the bull and looked up as if to say, "He's okay. He just wants to take pictures."

Then she started walking towards me, and the bull followed. I froze in my tracks, but kept taking pictures. Then, from the brush bordering the old logging road, a huge bull elk poked out his head and looked right at me. Just when I thought he was going to charge, the doe and other bull walked over to him, and the doe and the big elk touched noses. The bull then stepped out on the road and touched the doe's head. I stood there agape, taking pictures, not really believing what I was seeing. Before too long they moved off into the brush, leaving me with a once in a lifetime experience—and plenty of pictures.

ONE OF MY favorite pastimes is stalking and photographing the elk in Elk and Cameron counties. Last year I knew where three bulls were spending their time, and I often went out searching for them. On one particular morning I noticed a doe standing close to where I parked my car. I recognized her as being the same one I had been regularly seeing, so I paid little attention to her and proceeded to check the field where I had been seeing the bulls.

I didn't find them, so I started back to





**THERE WAS** lots of conversation as we walked along the road between the mountain and the river bridge. At that time there was a \$2 bounty on foxes, and we agreed that the hide should bring another \$2—but that's about the only thing we agreed on.

## The Four-Dollar Fox

By Bob Latimer

**F**ROM WHAT I see of High School students today, doubt if four dollars would cause as much of an argument now as it did between two buddies and myself one time. Don't remember just what year it was, but L. Jennings "Red" Eaker, Harry "Matt" Steck and I were classmates, good friends, and either hunting or talking about it when together. We had no doubt just passed the stage of "Either hunting with your father or hunting alone, no two or three kids hunting together."

It was reported by a fella loafing at our sales stable that someone had taken a crippled old horse into a slashing on a flat at the foot of Bald Eagle Mountain, across the river from Muncy, and evidently shot the horse and skinned it for the hide. There was snow, and foxes were supposed to be working the carcass. This interested us kids. Big plans

were made for the next Saturday.

My father had a long-legged dog, Walker blood, that was used mostly for rabbits, but when she stuck her nose in a fresh fox track she forgot everything else and was on her way. We called her Nell. She was fast and had a good chop voice. When she jumped a fox, it had to make a lot of tracks and far apart, too.

So, Saturday morning early, the three of us, with Nell on a lead, walked a couple miles to the scene. Had no trouble locating the horse carcass. There were lots of tracks—from farm dogs, foxes, and don't know what all. We finally singled out one leading away that Nell showed a lot of interest in, turned her loose on it, and spread out. It wasn't long until she announced the fox was on its feet. She was making lots of music. It turned out to be a gray, and the slashing was big enough and thick enough so it didn't leave, but cir-



### Question

If I break a leg and am in a cast, may I get a permit to hunt from my vehicle?

### Answer

No. A person's disability must be permanent for him to qualify for such a permit.

cled several times. Finally, Matt was in the right place and shot it. We had a big pow-wow. This was big doings, everybody was pleased, even Nell. We started for town at once. Didn't even skin the fox or try to single out another track and go for another.

There was lots of conversation as we walked along the road between the mountain and the river bridge. At that time there was a \$2 bounty on foxes and we agreed the hide should bring another \$2—but that's about the only things we did agree on. Red, being good at figures, figured out what the three-way split would be. I tried to invoke the old unwritten law: "The hide belongs to the hound." Of course neither of them agreed with me on that, or with each other. Matt held that he had shot the fox, he had it, he intended to keep it, and so far as he was concerned, the matter was closed. The conversation became quite heated, all three of us pulling in different directions. Nell voiced no opinion on the matter. Think if the financial differences hadn't come to light, we would no doubt have paraded down Main Street and maybe back. As it was, we

parted company and I told them this was the last time they could hunt over Nell.

Next week in school it was discussed again at length, but neither Red nor I seemed to gain any ground. Matt *had* the hide and was holding tight. Matt and Red lived next door to each other, went to and from school together, and about the middle of the week seemed to get things healed up between them. Presume Red realized he wasn't going to put his three-way split over. Toward the end of the school week they advised me they intended to hunt again on Saturday. They had located a black-and-tan hound at the upper end of Main St. that the owner said they could borrow, and . . . well, I'm not going to mention what else they said.

Anyhow, Saturday came and my father had a horse sale that day. We were busy at the stable when he was called to the phone in the office. It seemed, he told me later, when Matt and Red put their borrowed dog on what looked like a good track, the dog insisted on going not where the fox was going but where it had been. In other words he was a back-tracker, and they couldn't convince him to reverse himself. In later years I came to find out that once in awhile there was a dog like that, and the trait was pretty much incurable. Anyway, they told my father they had a good track, and could they borrow Nell? They were calling from a farmhouse over there.

My father told them sure, that he would send me right over with her, so they could get on with their work. Told me to hitch a horse to a sleigh and get Nell to them. I didn't enjoy that sleigh ride a bit, and am sure that I didn't overheat the horse either. About the only satisfaction I got out of it was when they returned Nell that night and reported they didn't get a shot all day.

Like all the arguments kids have, we got things healed up eventually, but it was rugged while it lasted.





## Compact Cameras

By George L. Harting

**M**Y ASSOCIATE calls them "Idiot Cameras," implying that their operation is so simple, the picture-taking novice can't help but be successful. He's right, too, at least about the fact that with these innovative models, anybody can be a successful photographer.

Few interests have so completely yielded to the evolutionary process as has photography. In the mid-40s Kodak's 35 mm and the Argus C-3 were the rage. Those units were totally manual; the photographer was on his own. The sharpness and clarity of his products depended entirely on how skillfully he matched shutter speeds with lens openings.

I carried an Argus C-3 through the mountains surrounding Slew Creek, Montana. Upon my return I had collected an acceptable batch of color slides that allowed me to assemble a visual story of my adventure. I did not carry a light meter, however, so three shots were taken of every scene—one under exposed, one I hoped would be just right, and another over exposed. From the three I expected to have one

of suitable exposure. What a waste of good film and developing costs!

When I acquired a single lens reflex camera, with a 35-70mm zoom and another from 75-250mm, I felt I had arrived. I soon discovered, however, that action photos were often missed because of the focusing time required. In addition, because the camera was bulky, I often left it back at camp. Consequently, I was denied exposures of a nesting woodcock, a pair of great horned owl fledglings, and of cat-size bear cubs that mom cuffed up a hemlock when I disturbed their day.

Years back I was told no camera could be made to focus automatically. Those who held that opinion had little concept of modern technology. Today's point and shoot camera not only focuses automatically, but also automatically adjusts for the speed of the film used, loads, rewinds and advances the film, tells the operator when the self-contained flash is needed, and allows just enough light to reach the film to produce beautiful sharp pictures. All the above is done automatically with both color and black and white film. The young lady who handles the processing of my film affirmed, "These are the sharpest pictures I have seen in a long time." The film had been exposed in a compact, point and shoot 35mm camera.

Today's miniature cameras represent a newly designed, highly sophisticated



TODAY'S miniature cameras are highly sophisticated pieces of equipment. Their small size and total automation make them a welcome choice for outdoorsmen.

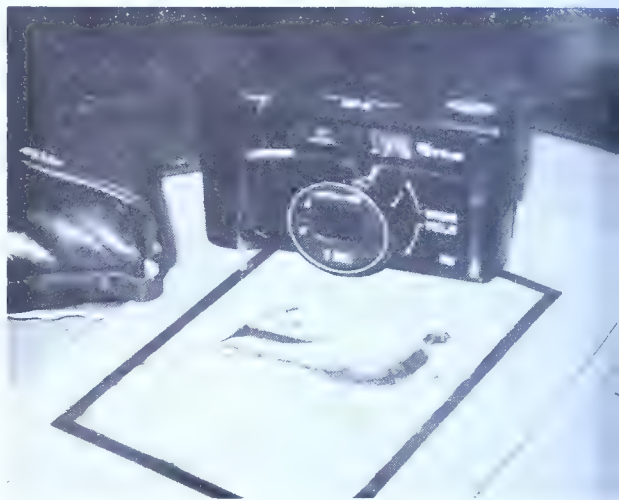
piece of photographic equipment. Most are only about two-thirds the size of single lens reflex units, and they're available from most popular manufacturers. They feature total automation, and my photographic supply house attendant informs me the models are the hottest items on his shelves. Total automation, however, is not the unique virtue of the miniatures—total automation single lens reflex models are available. What then are the characteristics that make these smaller models a welcome choice for the sportsman?

The virtues of my new acquisition are its compact dimensions, automatic features, moderate pricing, and various options.

### Compact Dimensions

Spring gobbler season is the time of awakening in the outdoors and offers many opportunities for the camera fan. After acquiring my single lens reflex camera I designed a carrying sling to transport it. I found the unit bulky and cumbersome, however, and as I previously stated, the camera was often left behind. My new camera is compact—significantly smaller than my earlier model, and it came with a flexible pouch that can be carried on the belt or slung over the shoulder. I carry mine on my belt and hardly notice its presence. In fact, if the camera is not with me afield, I don't feel fully dressed.

A listing of the camera's automatic features was given earlier. The one that



remains the front runner is its capacity for auto focusing. The whitetail buck is close and his stay will be short, allowing little time for cumbersome focal adjustments. The automatic system helps me freeze his pose with a sharp negative; the procedure is so simple that users initially feel something must have been omitted in the picture taking operation.

### Moderate Pricing

Make no mistake, these highly sophisticated cameras are not inexpensive. Compact units are offered by Canon, Kodak, Olympus, Minolta, Nikon and many others, and prices range from \$125 to \$225 or more. Budget conscious customers can select a lower priced model, but it may, of course, lack some of the features that make these cameras so popular. Still, a single lens reflex system equipped with comparable auto



features and the capability of handling telephoto lenses will command a sale price double or even triple that of its little brother.

Availability with Selective Options

For three years I struggled with my single lens reflex camera, often losing exposures while I focused. Therefore, I was anxious to find a more portable unit that would take instant photos. After carefully reviewing the market I rejected the cheaper models and discounted the need for a camera that was designed to be waterproof. I chose, instead, a model that featured selective lenses. My camera is a Model TF-200 made by Ricoh. It features a wide-view lens at 38mm, and by giving the lens a half turn, it extends to offer telephoto capacity at 65mm. Fuji shares technology with Ricoh and offers the same camera with a five-year guarantee for \$225. Both cameras employ a 6-volt lithium battery that, under normal use, has a life span of five years and offers instant employment of the flash system. It



didn't take me long to find this model to be the ideal choice for the sportsman.

So convincing was the performance of my camera that I acquired a second unit for our household. My wife plans to take one with her on her trip to Hawaii. Also, with two units we have instant access to cameras that will produce either black and white or color shots.

A photographic house advertised, "automatic cameras for snapshots and other units for *serious* photography." The quality of my negatives dictates this camera as being totally adequate and a welcome choice for outdoorsmen.

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**THE VIEW** was spectacular. The field of trees sloped sharply to a tree-lined stream, with fields on either side. Beyond the fields, the rooftops and steeples of McKeanburg were framed by the serene beauty of Blue Mountain.

## *A Learning Experience*

**By Ruth Schmit**

I HAD TAKEN only a few steps before a shot rang out on the ridge directly above me. I froze, knowing that if the hunter missed, I might get a shot. fleetingly, I wondered if two years of frustration were actually going to pay off. Might I finally get a shot at a whitetail?

No sooner had the thought flashed through my mind than I heard something crashing downhill through the brush—but I'm getting ahead of myself.

Opening morning of buck season found me confidently preparing for the hunt. I felt I had served my apprenticeship. Now I was finally ready to tag a deer.

The previous year's opener had found me improperly dressed for the frigid weather. By mid-morning I had gone home in frozen humiliation, while the rest of our party continued hunting. "Never would I be that unprepared again," I promised myself. So it was with considerable pride that I donned new pumpkin orange insulated pants and jacket, tucked toasty new gloves in the

pockets, and pulled on brand new felt-lined Sorel boots. The Sorels replaced the boots I had purchased from an Army surplus store in Portland, Oregon 25 years earlier. The Army boots had a certain nostalgic style about them, but they didn't offer any warmth, and water soaked right through them. The change was most welcome.

Although this was only my second year of whitetail hunting, I had hunted deer and elk many times in the Cascade Mountains of Washington. I hadn't really thought about hunting when we moved to Pennsylvania, until I realized that in order to paint believable landscapes of the Pennsylvania woods, I had to develop an understanding and a rapport with the local woodlands. Thus I chose to accompany my husband and sons during deer season. I'm never more keenly alert, nor do the woods ever seem more alive, than while hunting.

During the preseason, I spent many quiet hours on SGL 222, Schuylkill County, following game trails. So it was



that opening morning found me near a patch of mature hemlock where I had found a well used game trail during my scouting trips. Shortly after the first gunshots echoed off the hills, three does passed by, ghostly quiet in the misty gray of early dawn. With pounding heart and a mouth dry enough to spit cotton, I waited for one with antlers, but none came. I saw 17 does that day; no bucks.

I was back in the woods the next morning and the next, and the next, but I never saw another deer during buck season.

Discouraging as it was, I saw plenty of beautiful scenery and covered a lot of ground. I sat; I walked; I criss-crossed the ridge time and time again, without ever seeing another deer. Finally, with more important things to do than taking my rifle for a walk every day, I decided to wait until antlerless season.

On the first day of "doe" season I went back to the game lands with three of my sons. The day dawned sunny and warm, and I had a strong feeling I would get a deer that day. It didn't materialize during the morning hunt, though.

We were all back at the parking lot at 11:30 and helped Joel, the youngest of the three, load the large doe he had taken. He needed to get home to hang and skin the deer, and Mike and Dave also had to leave.

"What do you think, Mom?" Joel said. "Are you going to call it a day, too?"

"Nope," I replied firmly. "My deer is out there and I'm going to get it today—I can feel it in my bones."

It was a golden afternoon. I sat for a long while at the top of a wooded hillside where I could watch a large area below. The shadows moved with the sun as it traveled toward the west.

No deer appeared, so after a couple of hours, I began walking west along the upper flank of the ridge. Coming to a heavy stand of young hemlock, I turned and made my way downhill through the head-high trees. A sudden flurry of activity told me that several deer had just moved out ahead. It was frustrating to be able to hear but not see them. Very

## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

slowly I continued downhill, stopping beside a small clearing bordered by hemlock and rhododendron on the far side.

Just then I heard the unmistakable sounds of deer moving nonchalantly uphill a short distance away. I strained my eyes as they moved closer, until they were in the little hemlocks directly in front of me. Another step or two and I would be able to see them! I was trembling with excitement. Then the noises stopped. I waited, and waited, and waited. A check of their tracks revealed that they had discovered my presence and melted away. I was disappointed and yet exhilarated. At least I had had deer in close proximity.

## Christmas Trees

The woods became uncomfortably thick, so I turned east and came out to a field of little Christmas trees.

The view was spectacular. I caught my breath and forgot about deer for a moment. The field of trees sloped sharply to a tree-lined stream, with fields on either side. Beyond the fields, the rooftops and steeples of McKeansburg were framed by the serene beauty of Blue Mountain. It was panoramic and peaceful, like stumbling on rare and unexpected treasure. I made a mental note to return some day with paints and easel.

I collected my thoughts and had gone

only a few more feet when a shot rang out on the ridge above me, freezing me in my tracks. I knew that if the hunter missed, I might get a shot.

No sooner had the thought crossed my mind than I heard something crashing downhill toward me. Suddenly, a doe raced out of the brush. Catching sight of me, she changed direction to where she would cross a path about 40 yards in front of me.

My heart was pounding as I brought the rifle to my shoulder.

### Ease Off The Safety

Ease off the safety, my mind whispered. Then the deer was in the scope. NOW! With absolute confidence that the deer was mine, I squeezed the trigger. "Click." Not bang. Just click. I couldn't believe it; the rifle had misfired.

Stunned, I fumbled while trying to eject the shell and missed the chance for a second shot as the deer zigzagged downhill through the waist high pines. Then four shots rang out in rapid succession and it was all over. She lay in the field below, downed by a better hunter than I.

I collected my gear and headed back toward the car.

Frustrated and angry, I reviewed the misfiring problem as I trudged along. As usual, we had put off sighting in our rifles at the Game Commission range until the afternoon before the opening

of buck season. My rifle misfired several times then, but we decided that the shells were probably too old and therefore not dependable. (I had been carrying that same old box of shells for years.) Fortunately, we were able to get to a store and buy new shells to use the next morning, and a quick check at the range indicated my problem was solved.

The more I thought about the deer I didn't get, the madder I got. For two seasons I had hunted that game lands, cold, thirsty, and tired, and when I finally got a chance to shoot a deer, my rifle misfired. It was so unfair! I needed someone to be mad at.

Then this logical little voice that lives at the center of me spoke up.

"Wait a minute," it said. "This is your rifle. And if it's your rifle, you're responsible for it."

The voice continued without mercy, "Don't you suppose it would have made a difference if you had gone to the rifle range earlier? Then you would have had time to buy new shells and try them, and then, finding that the rifle still misfired, you could have gotten it fixed?"

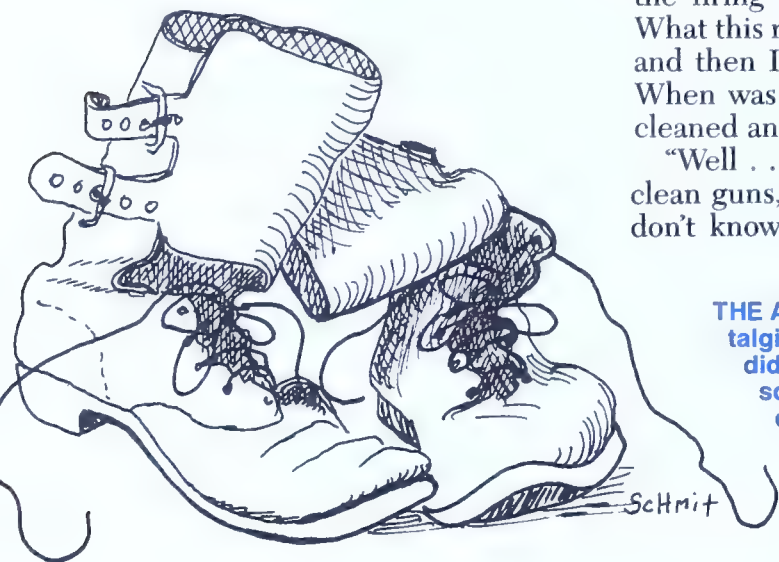
As much as I hated to admit it, I had found the person to be mad at; it was I.

When I told my husband Irv what had happened, he took the rifle, and disappeared into his workshop. A short time later he reappeared with the bolt in hand.

"I'm reasonably certain I know what's wrong with your rifle," he said. "There's a sticky buildup of dirt and oil that keeps the firing pin from working properly. What this rifle needs is a good cleaning, and then I'll bet it will work just fine. When was the last time your rifle was cleaned and oiled?"

"Well . . . but . . ." I sputtered. Men clean guns, I wanted to shout. Women don't know how to do that. Suddenly,

**THE ARMY BOOTS** had a certain nostalgic style about them, but they didn't offer any warmth and water soaked right through them, so the change was welcome.





horrified with myself, I realized what I was thinking. Then, with a sinking heart, I understood, as Paul Harvey would say, "the rest of the story."

My own stereotyped thinking had cost me that deer. I'm ashamed to admit that it never occurred to me that I should clean my own rifle. It just never occurred to me.

Thoroughly chastened, I asked Irv if he would teach me how to properly clean my rifle and, under his instruction, I cleaned, oiled and polished it till it shone.

I went to the firing range the very

next afternoon and, sure enough, the rifle worked just fine. Then I knew for certain that if I had taken proper care of my rifle, there would have most likely been a deer hanging in our garage at that very moment.

So, my second year of whitetail hunting is history. Once again, it was a learning experience. I've acquired enough humility to understand that my apprenticeship is probably far from over. In fact, I'm beginning to wonder what this year's lessons are going to be. But I'll be out there, you can count on it, and maybe, just maybe, I'll get a deer.

**P**ROBABLY EVERY hunter-trapper education instructor has at one time or another asked himself if he's really getting his message across, if he's really helping new sportsmen get started on the right foot, if he's really making significant contributions to the sports. Proof that our education efforts are paying big dividends are obvious because of declining accident rates, along with survey evaluations, but those are indirect and impersonal.

There are times, though, when our instructors receive feedback on a more personal level, and such was the case for Lehigh County hunter-trapper education instructor Elwood "Woody" Benner when he received the following letter:

Dear Woody,

I hope you remember me. I'm one of the nurses who attended your hunter safety class about a year ago. I want to thank you personally for the safe and pleasurable hunting season I enjoyed because of your class. If I had a dollar for every time your voice echoed in my head over the last few weeks I'd be a rich woman. I thought of "be sure of your target and what's beyond" and your many other safety messages so many times that I'll never forget your class. I know that if you made half the impression on the youngsters in the class that you made on me, there are plenty of safe hunters out there. I salute you for your important volunteer efforts in this community. Please, keep up the good work. You guys are very special people.

I came up skunked in deer season, after many days of rain, snow and cold, but on the last day of doe season my boyfriend and I did get ourselves a poacher. We were driving out of the woods after legal shooting hours and saw a man shoot from his car and wound a doe on the road. By that time I had already written down his license plate number and the make and model of the car. Because of you I knew what to do in such a situation. We called the Game Commission within ten minutes. By the time we got back to our homes the man had been cited and fined \$500. I may not have gotten a deer, but I did get a great deal of satisfaction from knowing I can (and did) make a contribution to cleaning up our sport. In conclusion, thank you for all your fine instruction. Keep doing what you do—you do it well.

Happy hunting,  
Mary



## FIELD NOTES



### Your Help's Needed

**INDIANA COUNTY**—One of the largest bucks taken here last year was killed illegally. That's sad, but even sadder is the fact that several people who profess disgust at the act are, as of this writing, unwilling to provide the information needed to make a successful prosecution. —WCO Mel Schake, Indiana.

### Knows His Stuff

**CLEARFIELD COUNTY**—Elk County WCO Dick Bodenhorn invited me to go deer hunting with him on a day off during the second week of buck season. He told me he knew of several spots where there were plenty of antlered deer, and we ended up going to a nearby game lands. Well, it didn't take Dick long to convince me he knew what he was talking about. We weren't in the woods ten minutes before Dick dropped a buck. Now, Dick, do you know any good turkey hunting spots?" —WCO Colleen M. Shannon, Luthersburg.

### Fond Memories

**ARMSTRONG COUNTY**—After 13 years here, I've transferred to Berks County. It's amazing how quickly time flies, especially when we're busy and enjoying ourselves. I know I've been here a long time, though, when I think of all the weddings and funerals I've attended, and that I've arrested some guys four times and one person seven. But any delusions I had of still being a young rooster went flying out the coop when a strapping young man with three children clinging to him approached me at the Dayton Fair and said, "Hi, Mr. Scott, I'm so-and-so. You taught me hunter education when I was 11 years old." All things considered, I've been more fortunate than I deserve. My fellow employees and the people I've worked with and met have been great. Even most of those I had to arrest treated me with respect, even though they weren't happy. I'd like to thank all of you who showed me kindness, whether it was a cup of coffee or pulling me out of a ditch (which happened more than once). I'm leaving you, but I'll never forget you. —WCO Al Scott, Rural Valley.

### Missed the Point

My brother, Ralph Ray, and his friends Don Himler and Chuck Moffit, all of Latrobe, went hunting during the flintlock season. Chuck wounded a doe, but there was no snow, so the only trail was occasional drops of blood on leaves. Chuck, not being much of a tracker, left the trailing job to Ralph and Don. Chuck's job was to follow along and stay with the most recently found blood stain. After proceeding for a short way, Ralph turned and found Chuck just two steps behind. When asked what he was doing, Chuck replied, "You told me not to lose the trail and I didn't. I picked up the leaves with blood on them and have them all right here." Well, Chuck didn't lose the trail; in fact, he probably still has it. —LMO Barry K. Ray, Sr., Rockwood.





## Losing Opportunities

**BLAIR COUNTY**—Upon noticing that hunter-trapper education classes seemed to be getting smaller, I checked with our License Division and found that sales of Junior Hunting Licenses (for those 16 or under) were 130,855 in 1985-86; 124,543 in 1986-87; 116,888 in 1987-88; and—at last count—107,643 for the 1988-89 license year. Among the several possible reasons for this decline is the increasing number of marriages ending in divorce. Many youngsters are being raised solely by their mothers, who in most cases are not hunters.—WCO D.D. Martin, Hollidaysburg.

## Busy Jim

**SCHUYLKILL COUNTY**—Records are made to be broken, and so it is that Deputy Jim Koons, Hegins, has broken one of his own. In 1987 Jim handled 152 roadkilled deer, but last year he handled 186. Most went to needy families. Even with the bonus deer system, we still have lots of deer.—WCO John C. Shutkufski, Pottsville.

## Or a Ducking Duck

**CAMBRIA COUNTY**—My deputies and I were pleasantly surprised by the few complaints we received while working at the Johnstown Sport Show. There have been times when working at an exhibit made us feel like ducks at a shooting gallery, but this one was truly enjoyable. Complaints were aimed not at Game Commission programs, but at ATVs and slob hunters. It's a lot easier being a sympathetic ear than a fact-spouting mouthpiece.—WCO R.F. Weaver, Johnstown.

## And Will Be a Big Help

Let's resolve to make 1989 the "Year of the Clean Outdoors." While afield, don't litter, and carry out all you can. Believe me, it's easy to do.—LMO Jerry Becker, DuBois.



## Good Food Source

Shyrl Hood, Chief of the Fish Commission's Division of Warmwater/Coolwater Fish Production, reported that two golden eagles spent two weeks last winter around the Linesville Fish Culture Station and fed around the well water discharge point. In addition, I saw six immature bald eagles sitting together on Ford Island, which is near the fish hatchery.—LMO Keith Harbaugh, Meadville.

## Do Your Homework

**PHILADELPHIA COUNTY**—Every year people ask us where they can go to hunt, yet satisfying such requests on an individual basis is impossible. Remember, part of the sport is locating places yourself, and now is a good time to scout around, meet landowners, and line up places for the fall. Don't wait until opening day.—WCO Richard J. Shire, Philadelphia.

## As They've Been Showing

**POTTER COUNTY**—Last year's good mast crop followed by a mild winter with little snow left deer scattered throughout the forests, not yarded up. Consequently, many people accustomed to seeing large herds along our roadways believe there aren't many deer left. Believe me, as the upcoming hunting seasons will show, there are plenty of deer around.—WCO Ron Clouser, Galeton.



### Learned Her Lessons Well

**JUNIATA COUNTY**—Last year De-  
lores Strawser, Mt. Pleasant, attended a  
hunter-trapper education class with her  
two daughters, Jenifer and Jill. What  
makes this noteworthy is that she then  
went out and got a turkey, a bear and a  
deer. I bet her husband wishes he would  
have been able to attend the class.  
—WCO Dan Clark, Honey Grove.

### Deceiving

**WESTMORELAND COUNTY**—The  
reflective glass used on many new build-  
ings is attractive, but it can be deadly for  
wildlife. A recent example took place in  
Irwin, where both a hungry Cooper's  
hawk and the mourning dove it was  
chasing slammed into this type of  
glass.—WCO D.L. Neideigh, Greens-  
burg.

### Most Important Factor

**FOREST COUNTY**—With the hunt-  
ing seasons soon to arrive, here's a safety  
tip that may also improve your success:  
Have your vision checked. What you're  
not seeing, or not seeing as clearly as  
you should, can make all the difference  
in the world. It may spell the difference  
between seeing a flicking bushytail or  
not, a big rack in the brush, or—most  
importantly—the figure of another  
hunter in your line of fire. You wouldn't  
go hunting without making sure your  
rifle is sighted in, so why not do the  
same for your eyes?—WCO Donald G.  
Chaybin, Brookville.

### Another Example

**BEDFORD COUNTY**—Eric Cunard  
was traveling on Route 36 through the  
Loysburg Gap when he noticed a dead  
mink alongside the road. As he passed  
the animal Eric noticed something odd,  
so he went back for a closer look. The  
mink had a blue band around its neck.  
Thinking the Game Commission may  
have tagged it, Eric brought the fur-  
bearer to me. Well, the blue band wasn't  
a tag. It was a piece of trash. If this  
animal hadn't been hit on a highway, it  
most certainly would have suffered a  
slow agonizing death, all because of  
somebody's thoughtlessness.—WCO  
R.J. Trombetta, Woodbury.

### Pristine Resource

**TIOGA COUNTY**—While camping  
along Pine Creek, Scott Turner and a  
friend of his were fortunate enough to  
see three river otters and then two bald  
eagles. I hope Pine Creek remains clean  
and able to support such a rich variety  
of wildlife, for without it we all would  
be losers.—WCO Frank Bernstein,  
Middlebury Center.



### Really Isn't Much

**PERRY COUNTY**—At a recent  
hunter-trapper education course we  
were discussing the 250 square inches  
of fluorescent orange requirement  
when one of the students asked, "Does  
a small person have to wear all that?"  
—WCO Leroy Everett, Newport.



## Thoughtless

**WAYNE COUNTY**—With Pennsylvania and New York each conducting bald eagle reintroduction projects, sightings of these birds along the Delaware have become fairly common. Unfortunately, a dead eagle was found on New York's side of the river last winter. It was obvious the bird had been shot with a shotgun, and as it occurred during New York's small game season, it could have been done by a hunter. I guarantee you, though, it was no sportsman who was responsible. If you have any information about this or any other such incident, please contact our region office. Sportsmen do care.—WCO Donald R. Schauer, Honesdale.

## Free Delivery

**UNION COUNTY**—Receiving a package from the United Parcel Service isn't that unusual, but sometimes what's in the package is. Not long ago, after answering the door, my wife said, "Look what UPS delivered." She then handed me a dead screech owl. The UPS driver had struck the bird and brought it to me, thinking I could use it for educational purposes.—WCO Bernie Schmader, Millmont.

## Worthwhile Endeavor

Last winter's survey of the hybrid Sichuan pheasants in Mercer County was a resounding success. Pheasant numbers were up 47 percent over the previous winter's census, and nearly all the teams reported seeing plenty of rabbit sign, too. Also, the survey gave area sportsmen and agency personnel an opportunity to cooperate and get to know one another in an informal atmosphere. Thanks to all who participated.—LMO Jim Deniker, Sandy Lake.

## In No Hurry

**SOMERSET COUNTY**—Last winter's mild weather apparently had an effect on wildlife. I picked up a buck still carrying antlers on January 21, and knew of several active scrapes and buck rubs at that time.—WCO D.W. Jenkins, Somerset.

## Good Time to Correct All Three

**BEDFORD COUNTY**—Every summer I try to contact about 100 farmers in my district, to discuss previous and upcoming hunting seasons. The most common complaint these folks have is that hunters fail to ask permission; second is littering, and third is that the hunters don't come back in the summer to shoot woodchucks.—WCO Dave Kopenhagen, Everett.



## Couldn't Wait

**WASHINGTON COUNTY**—Last winter I saw groundhogs on December 27 and again on January 13, when I also heard a turkey gobbling.—WCO R.F. Senko, Washington.

## Great Progress

**YORK COUNTY**—An article in *National Wildlife* magazine about how public perceptions and attitudes concerning predators have completely turned around over the past couple of decades also mentioned how populations of many predators have been restored. That got me to thinking of the Game Commission's bald eagle and osprey recovery projects, and it got me to feeling proud to be associated with such conservation work. Of course, conservation can't be left only to the professionals. The responsibilities and concerns are on all of us.—WCO Greg Houghton, Emigsville.

## Weather's No Obstacle

Although the winter was exceptionally mild, we did have a few rough days in February. On one of the roughest, we were checking SGL 74, Clarion County, when we saw a man walking along a trail, about two miles from the nearest public road. We stopped and talked with him and found that he had come up from Pittsburgh—on one of his rare days off—to scout for some new hunting areas. He said he also wants to explore some other game lands in the area if he gets the opportunity. It sure is nice to meet hunters who enjoy the sport the year round, whether they're actually hunting or not, regardless of the weather.—LMO James G. Bowers, Knox.



## Painful

**VENANGO COUNTY**—I vividly recall from my grade school days when a friend of mine stuck his tongue against a metal flag pole on a bitter cold day. When he ripped his tongue from the pole, it bled profusely. That memory came to mind last deer season, when a hunter, after dropping his gun and then finding the barrel clogged, tried—after unloading it—to blow the snow from the barrel. He tore his lip so badly he left a blood trail for the rest of the day. I hope this lesson helps others like the flag pole incident many years ago helped me.—WCO Leonard Hribar, Seneca.

## Paid Dearly

**BEAVER COUNTY**—Vince, Bobby and Dean went buck hunting last year. All they got, however, was a doe, but then they were in a quandary over what to do with it. Vince stashed it, but after questioning, he led some officers to the spot. Surprise, the deer was gone. Meanwhile, Bobby's mother was heard to exclaim, "If you bring an illegal animal into this house, both you and it are going to end up on the street." But, hey, Dean's mom was at work. (By this time the deer had covered more ground dead than alive.) Officers arrived at Dean's soon after his mother, and she was not in a very good mood. Although the three lads were cited, probably no violator ever went through more purgatory than Dean did when his mother found a dead deer in her living room, behind the sofa!—WCO Steven M. Spangler, Beaver.

## Once, But Not Twice

**MERCER COUNTY**—A few years ago, when I was a deputy, I was helping WCO Wayne Lugaila trap turkeys. We were having difficulty attracting a particular flock, but after a long wait, the birds finally started in. They were almost to the bait when movement off to the side caught my attention. It was a red fox; the turkeys scattered. Discouraged, we decided to wait and see if the birds would return. Surprisingly, after about an hour, the turkeys reappeared. But again I noticed movement off to the side, only this time it was two raccoons. The birds did not flee, though. Instead, they chased the raccoons, sent them scurrying up the nearest tree, and then kept them there for half an hour by circling the tree.—WCO John A. McKellop, Sandy Lake.

## Behind Times

**LUZERNE COUNTY**—Larry Mensinger, Nescopeck, reported seeing two large antlered bucks on February 17.—WCO Robert W. Nolf, Conyngham.





**GEORGE THRUSH**, Harrisburg, who dropped this 134-pound 8-point in Snyder County, contributed to Pennsylvania's record buck harvest last year. Hunters took 163,106 bucks in 1988 and 218,293 antlerless deer.

## Hunters Set New Deer Harvest Records

**P**ENNSYLVANIA deer hunters did it again for the third straight year. The 1988 deer seasons brought a new record buck kill and shattered an almost 50-year-old record for total deer harvested.

According to figures released by the Bureau of Wildlife Management, hunters last year took 163,106 bucks and 218,293 antlerless deer, for a total

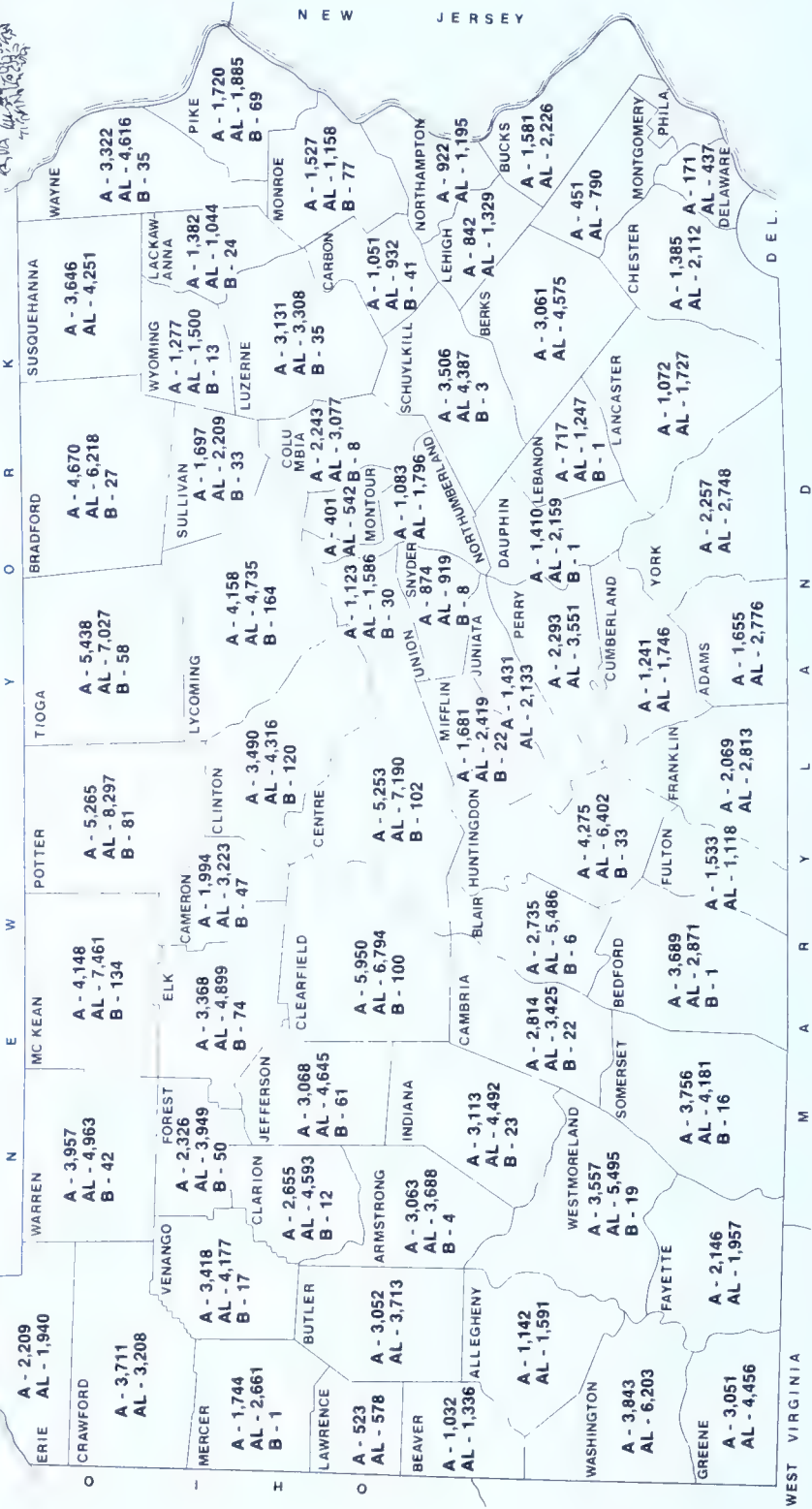
harvest of 381,399 whitetails. The previous buck record, 157,547, was set in 1987; while the previous total (reported) harvest record, 186,575, was set in 1940.

Commenting on the past season and its unprecedented hunter success, Wildlife Management Bureau Director Dale Sheffer noted, "For the first time in quite a few years, the size of the antlerless harvest was enough to halt the upward spiral in total deer numbers. Quite frankly, we're happier about that than either the new buck harvest record or the total harvest figure. The antlerless harvest, incidentally, was the third highest on the books.

"What we've said about deer numbers for quite some time now is still valid," said Sheffer. "More and more bucks can't be harvested year after year if total deer numbers are declining. Hunters  
*continued on page 36*



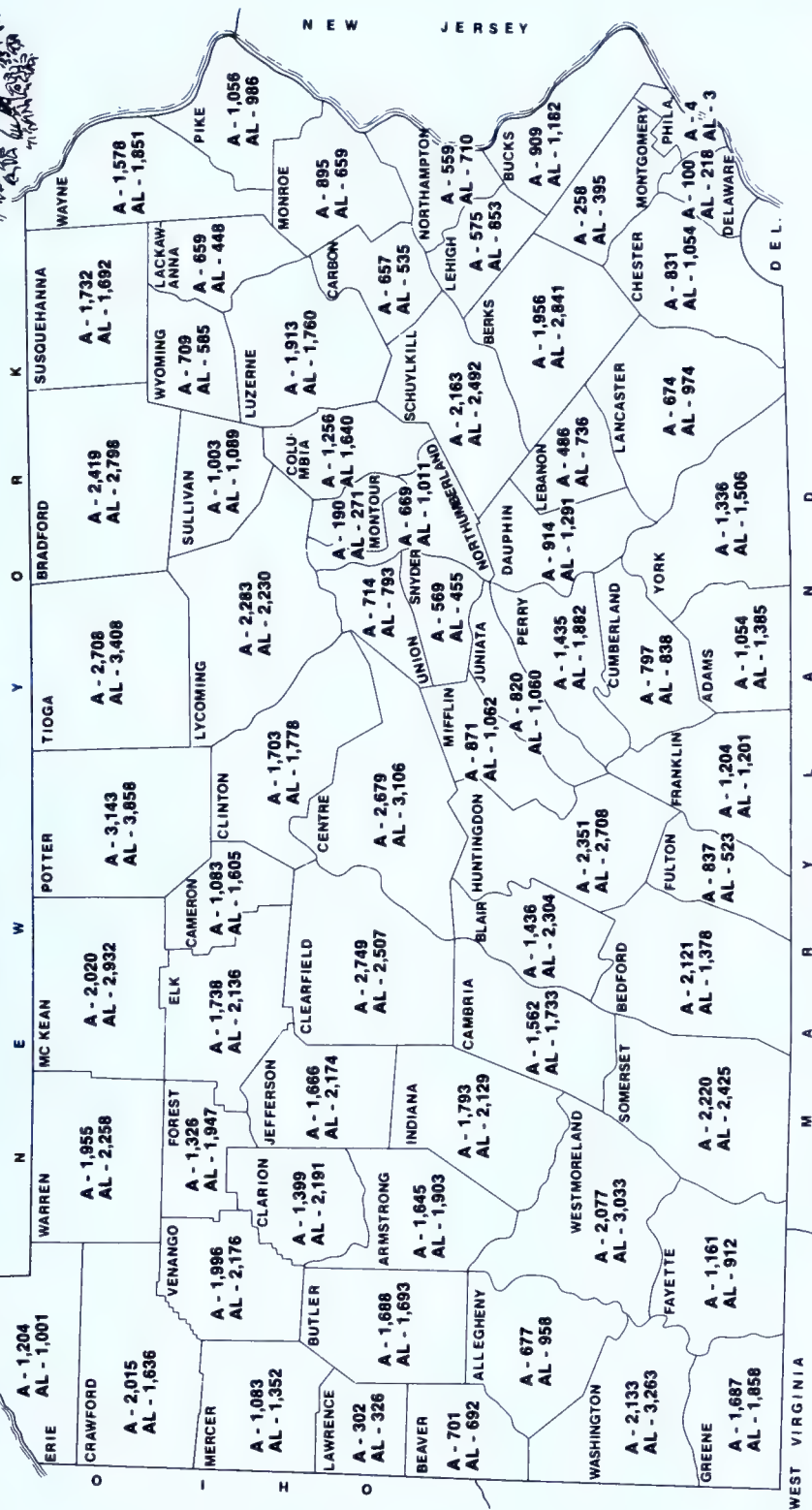
# 1988 CALCULATED DEER & BEAR HARVEST



ANTLERED DEER (SYMBOL - A)	ANTLERLESS DEER (SYMBOL - AL)	GRAND TOTAL BEAR HARVEST (SYMBOL - B)
ALL SEASONS	162,368	1,614
COUNTY UNKNOWN	738	
TOTAL	163,106	381,399



# 1988 REPORTED DEER HARVEST



## ANTLERED DEER (SYMBOL - A)

REGULAR SEASON	83,477
COUNTY UNKNOWN	409
ARCHERY SEASON	6,221
MUZZELOADER SEASON	408
TOTAL	90,515

## ANTLERLESS DEER (SYMBOL - AL)

REGULAR SEASON	94,978
COUNTY UNKNOWN	495
ARCHERY SEASON	3,613
MUZZELOADER SEASON	5,798
TOTAL	104,884

GRAND TOTAL DEER HARVEST ..... 195,399

simply can't take deer that don't exist. I think it's also important to note that of the 26 most successful buck seasons on record, 25 have occurred during the past 25 years."

The actual deer harvest is based on several factors, all stemming from the actual number of deer kill report cards filed by successful hunters, which are then factored against known reporting rates for each county. As an example, statewide last year, hunters filed 90,515 buck harvest cards and another 104,884 cards on antlerless deer; an overall reporting rate of just under 55% (55% for bucks, 49% for antlerless deer).

1988 county reporting rates are based on the fact that last year, Game Commission officers actually examined 35,685 deer, in the field and at process-

ing plants, yet only 19,592 of those deer checked and aged were actually reported to the agency as required by law.

The 1988 harvest is based on accurate, confirmed counts by an independent data processing firm which records information from the report cards. The cards are now on file at Game Commission headquarters in Harrisburg, where the public is welcome to inspect and count them.

Leading 1988 buck counties were Clearfield, 5950; Tioga, 5438; Potter, 5265; and Centre, 5253. Top antlerless counties were Potter, 8297; McKean, 7461; Centre, 7190; and Tioga, 7027. Highest in total harvest were Potter, 13,562; Clearfield, 12,744; Tioga, 12,465; Centre, 12,443; and McKean, 11,609.

## 1989 Antlerless Allocations

**A**NTLERLESS DEER license allocations approved last March by the Pennsylvania Game Commission are designed to adjust deer populations in 56 of the state's county management units.



According to Dale Sheffer, director of the Bureau of Wildlife Management, "We are looking for a harvest similar to last year's (about 218,000), and are hoping hunters reduce deer herds in 51 management units. Populations should increase in five others, and stabilize in the rest.

"The deer management program worked better in 1988 than it has for years, primarily because all antlerless deer licenses were sold in every county except Chester, for the first time in about five years," he continued.

"Most importantly, we halted the upward spiral in deer numbers. Secondly, we were able to turn the population trend around in many counties. Densities have been lowered in 34 counties, and that's the first time this has happened in many years. Things will be better for deer and people in all of those counties," Sheffer explained.

**RUBY BAUMAN**, Reinholds, was among the many hunters who took advantage of the bonus antlerless deer license initiative introduced statewide last year. She took these deer on the same day but in different areas.



"Deer need to be managed on the basis of recreational value, as well as to minimize conflicts with other land uses, such as farming and timber management," Sheffer pointed out.

"Currently, deer populations in 53 counties are above goals," said Sheffer. "The goals, or the population densities we're trying to reach, are based basically on how many deer can be adequately supported by forested habitat.

"Last winter there were 38 percent more deer in the state than the designated carrying capacity of the range. Those who like lots of deer can be thankful for a mild winter—a normal winter would have produced significant mortality, and severe weather could have been disastrous.

"We haven't had serious winter deer losses since the 1981-82 winter, due to mild weather. If high whitetail numbers continue, we're certain to get hit hard sometime in the future," he said.

"Now we have to continue the population reduction trend. Whitetails in those 34 counties where we have been able to effect reductions must continue to be thinned. We're not attempting to do it all at once. We seldom aim for reductions of more than five to ten percent per year. We just need to chip away at those high densities.

"The bonus antlerless program worked well in most counties last year. After all, the number of licenses allocated is designed to produce a predetermined harvest, and from a biological standpoint, it doesn't really matter how many hunters are involved, or what the

individual limit is. It's only necessary that the licenses be utilized," Sheffer explained.

"We received 30,696 deer kill report cards through the bonus tag program last year. Considering the reporting rate is only about 50 percent, that means about 60,000 'extra' antlerless deer were harvested. From the standpoint of the deer, the condition of the range, and other uses of the land, that's a significant harvest.

"Now, if we can just keep the population trends on course in those 34 counties, and get the boat turned around in some other units, Pennsylvania's deer will be in much better shape," he said.

According to Biologist Bill Palmer, hunter success ratios changed again in 1988 (as they usually do every year). Success rates had been dropping for about five years, but in 1988 they improved by 15 percent; it took about 3.7 antlerless licenses to harvest one deer in 1987, but only 3.2 in 1988. Had the success rate not increased, it would have been necessary to allocate considerably more antlerless licenses this year than the 692,100 authorized, Palmer said.

Palmer estimates the number of deer in the 1988-89 winter was about three percent lower than the preceding year's figure, and the 1989 antlerless allocation is designed (if hunter success rates do not change) to reduce the population another five percent.

Following are the 1989 county allocations, expected (report card) harvests, and the planned change in the 1989 post-season population:

COUNTY	LICENSES	HARVEST	% CHANGE
Adams	8,750	1,170	- 10
Allegheny	11,700	1,048	- 5
Armstrong	13,500	2,296	- 10
Beaver	4,950	732	0
Bedford	16,800	2,249	0
Berks	16,150	2,677	- 5
Blair	7,600	1,258	- 10
Bradford	19,700	3,303	- 5
Bucks	12,300	1,139	- 5
Butler	13,600	1,995	- 10
Cambria	9,550	1,835	- 5
Cameron	9,200	1,573	- 10

<i>COUNTY</i>	<i>LICENSES</i>	<i>HARVEST</i>	<i>% CHANGE</i>
Carbon	3,500	433	+ 5
Centre	14,600	2,523	- 10
Chester	11,700	1,060	- 5
Clarion	9,850	1,917	- 5
Clearfield	14,600	2,469	- 5
Clinton	15,000	1,892	- 6
Columbia	10,600	1,795	- 5
Crawford	16,800	2,597	0
Cumberland	7,600	858	- 9
Dauphin	8,000	1,305	- 9
Delaware	1,700	249	-75
Elk	13,900	2,195	-10
Erie	14,400	1,796	- 5
Fayette	5,000	782	+ 5
Forest	11,250	2,005	-10
Franklin	6,250	1,077	-10
Fulton	8,800	873	0
Greene	10,600	1,573	-10
Huntingdon	19,350	2,701	-10
Indiana	9,900	1,872	- 5
Jefferson	11,800	2,216	-10
Juniata	4,000	555	- 5
Lackawanna	4,850	624	0
Lancaster	6,950	778	-10
Lawrence	2,150	340	+10
Lebanon	5,650	669	-10
Lehigh	5,600	806	-10
Luzerne	12,600	1,981	- 5
Lycoming	19,500	2,538	- 5
McKean	14,800	2,755	-10
Mercer	5,350	1,084	0
Mifflin	6,750	828	-10
Monroe	5,900	649	+ 5
Montgomery	3,700	359	- 5
Montour	2,600	316	-10
Northampton	6,500	741	-10
Northumberland	6,300	849	- 5
Perry	6,900	1,078	- 5
Pike	5,050	661	0
Potter	17,750	3,679	-10
Schuylkill	13,500	2,492	- 7
Snyder	2,950	435	0
Somerset	13,200	2,425	0
Sullivan	7,500	1,241	- 7
Susquehanna	13,550	2,201	- 5
Tioga	23,500	4,052	- 2
Union	2,500	436	0
Venango	15,600	2,770	- 5
Warren	20,200	2,628	0
Washington	18,800	3,262	-13
Wayne	10,500	1,530	-10
Westmoreland	14,600	2,502	-10
Wyoming	6,300	758	- 5
York	17,000	1,684	- 2
STATE TOTALS	692,100	105,169	- 5



# Antlerless Deer License Regulations Modified

**A**NTLERLESS DEER license application regulations have been modified in order to save resident hunters from having to wait in long lines at county treasurers' offices, and to give nonresidents a more equitable opportunity to hunt antlerless deer in Pennsylvania.

County treasurers will begin accepting antlerless license applications, by

mail only, from residents on Monday, October 2. Nonresidents may apply, again only by mail, beginning October 16. Licenses remaining on October 23 will become available, still by mail only, to both residents and nonresidents as antlerless licenses or bonus tags. Then, on November 6, unsold bonus tags and antlerless licenses may be sold either by mail or over-the-counter.

## 1989-90 Seasons and Bag Limits Set

**T**HE 1989-90 hunting and trapping seasons and bag limits were set by the Pennsylvania Game Commission at their March meeting in Harrisburg. Among the highlights for the upcoming seasons, the Commission extended the winter rabbit, grouse and squirrel seasons by one week, through January 27.

The trapping season for coyotes, foxes, opossums, raccoons, skunks and weasels, and the fox and raccoon hunting season, will open November 2 and end February 24.

Other seasons established by the Commission include: archery deer, September 30-October 27; early small game opens October 14 and regular small game, October 28-November 25; turkey opens October 28 and closes one, two or three weeks later, depending on management area; bear, Novem-

ber 20-22; antlered deer November 27-December 9; antlerless deer December 11-13; flintlock/winter archery deer and pheasants in northern Pennsylvania, December 26-January 6; winter rabbits, ruffed grouse and squirrels, December 26-January 27 (except grouse season closes January 6 in 12 counties).

The Commission also proposed new regulations that would provide an additional hour of hunting in the spring gobbler season—effective with the 1990 season. Instead of 11 a.m., hunting will end at 12 noon. Also proposed was an additional hour of hunting each shooting day at the Pymatuning Wildlife Management Area. Shooting will end at 1:00 p.m. Also proposed was a prohibition on using wild birds and wild animals for propagating purposes.

## SEASONS AND BAG LIMITS 1989-1990

The Pennsylvania Game Commission, in Harrisburg on March 30, 1989, established the following seasons and bag limits for resident game and furbearers for the 1989-90 hunting license year which begins July 1.

Open seasons include first and last dates listed, Sundays excepted, for game. The opening hour for small game, migratory game birds and other wild birds and

animals (except waterfowl in the Lake Erie Zone) on October 28 will be 9:00 a.m. Shooting hours for other days and seasons will be from one-half hour before sunrise until sunset, except turkey gobblers (spring season) from one-half hour before sunrise until 12:00 noon; raccoons, which may be hunted any hour except during the firearms deer seasons when the hours are from sunset to one-half hour before sunrise; and woodchucks, coyotes, opossums, skunks, and weasels, which may not be hunted before noon April 21–May 19. Seasons and shooting hours for migratory birds will be announced later.

Daily Limit	Field Possession Limit		DATES OF OPEN SEASONS	
			First Day	Last Day
6	12	Squirrels, Gray, Black, Red and Fox (combined) . . . . .	Oct. 14 . . . . .	Nov. 25 AND Dec. 26 . . . . . Jan. 27
2	4	Ruffed Grouse (Statewide)* . . . . .	Oct. 14 . . . . .	Nov. 25 AND
		(Statewide)* . . . . .	Dec. 26 . . . . .	Jan. 6
		(In 55 counties)** . . . . .	Jan. 8 . . . . .	Jan. 27
4	8	Rabbits, Cottontail . . . . .	Oct. 28 . . . . .	Nov. 25 AND
			Dec. 26 . . . . .	Jan. 27
2	4	Pheasants, males only . . . . .	Oct. 28 . . . . .	Nov. 25
		(Except in designated area)*** . . . . .		
		—both sexes in designated area*** . . . . .	Dec. 26 . . . . .	Jan. 6
4	8	Bobwhite Quail (In 54 counties)**** . . . . .	Oct. 28 . . . . .	Nov. 25
2	4	Hares (Snowshoe Rabbits) or Varying Hares . . . . .	Dec. 26 . . . . .	Dec. 30
	Unlimited	Woodchucks (Groundhogs)#—No Sunday Hunting . . . . .	July 1 . . . . .	June 30

FURBEARERS AND COYOTES—HUNTING

Unlimited	Foxes—Red and Gray—Statewide# . . . . .	Nov. 2 . . . . .	Feb. 24
Unlimited	Skunks, Opossums, Weasels, Coyotes# . . . . .	July 1 . . . . .	June 30
Unlimited	Raccoons—Statewide# . . . . .	Nov. 2 . . . . .	Feb. 24

Daily Limit	Season Limit	BIG GAME	DATES OF OPEN SEASONS	
			First Day	Last Day
1	1	Wild Turkey—Management Area No. 1 + . . . . .	Closed to Fall Hunting except open in Crawford Co. and Erie Co. east of I-79 and south of I-90 Oct. 28 . . . . .	Nov. 4
		—Management Area No. 2-A & 2-B+ . . . . .	Oct. 28 . . . . .	Nov. 4
		—Management Area No. 3 & 4 + . . . . .	Oct. 28 . . . . .	Nov. 18
		—Management Area No. 5, 6, 7 & 8 + . . . . .	Oct. 28 . . . . .	Nov. 11
		—Management† Area No. 9+ . . . . .	Closed to Fall hunting	
		—Spring Gobbler Season . . . . . (Bearded Birds Only, Statewide)	April 21 . . . . .	May 19
1	1	Bear—by individual—Statewide . . . . .	Nov. 20 . . . . .	Nov. 22

Daily Limit	Season Limit	BIG GAME, DEER	DATES OF OPEN SEASONS	
			First Day	Last Day
1 antlered or 1 antlerless deer during license year	Deer, Archery Season, any deer—Statewide . . . . .	Sept. 30 . . . . .	Oct. 27 AND Dec. 26 . . . . .	Jan. 6
	Deer, Antlered, with 2 or more points to an antler or a spike 3 or more inches long—Statewide . . . . .	Nov. 27 . . . . .		Dec. 9
	Deer, Antlerless, with required antlerless license . . . . .	Nov. 27 . . . . .		Jan. 6
	Special Regulations Area listed below + +			
Bonus deer with bonus tag	Deer, Antlerless—Statewide . . . . .	Dec. 11 . . . . .		Dec. 13
	Deer, Flintlock Season, any deer—Statewide . . . . .	Dec. 26 . . . . .		Jan. 6

CROWS

Unlimited	Crows (Hunting on Fridays, Saturdays, Sundays Only) . . . . .	July 1 . . . . .	Nov. 19 AND Dec. 22 . . . . .	Apr. 8
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TRAPPING

Unlimited	Raccoons, Skunks, Opossums, Foxes, Weasels, Coyotes . . . . .	Nov. 2 . . . . .	Feb. 24
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Daily Limit	Season Limit	TRAPPING (continued)	DATES OF OPEN SEASONS	
			First Day	Last Day
	Unlimited	Minks .....	Nov. 23 .....	Dec. 24
	Unlimited	Muskrats .....	Nov. 23 .....	Dec. 24
6	6	Beavers—In 64 counties .....	Dec. 20 .....	Mar. 4
6	24	Beavers—Bradford, Susquehanna, Wayne Counties .....	Dec. 20 .....	Mar. 4
<b>NO CLOSED SEASON#</b> —European Starlings and English Sparrows.				
<b>NO OPEN SEASON</b> —All other wildlife species.				
<b>FALCONRY SEASON</b> —Details of this season will be disseminated to licensed falconers.				

## *SPECIAL REGULATIONS*

# During the regular antlered and antlerless deer seasons, Nov. 27-Dec. 9 and Dec. 11-13, and any extension thereof, it shall be unlawful to hunt any other wild bird or animal (except coyotes if the hunter has a valid, unused deer tag) from one-half hour before sunrise to sunset—migratory waterfowl and game birds on regulated hunting grounds are excepted; hunting during spring turkey season April 21-May 19 for coyotes, opossums, skunks, weasels, groundhogs prohibited before 12 noon. Furbearers may not be hunted on Sunday.

\* Grouse hunting prohibited on designated portion of State Game Lands 176, Centre County.

\*\* Grouse hunting permitted Jan. 8-27 in all counties except Berks, Bedford, Butler, Centre, Clarion, Dauphin, Fayette, Huntingdon, Indiana, McKean, Monroe and Susquehanna, where the season is closed.

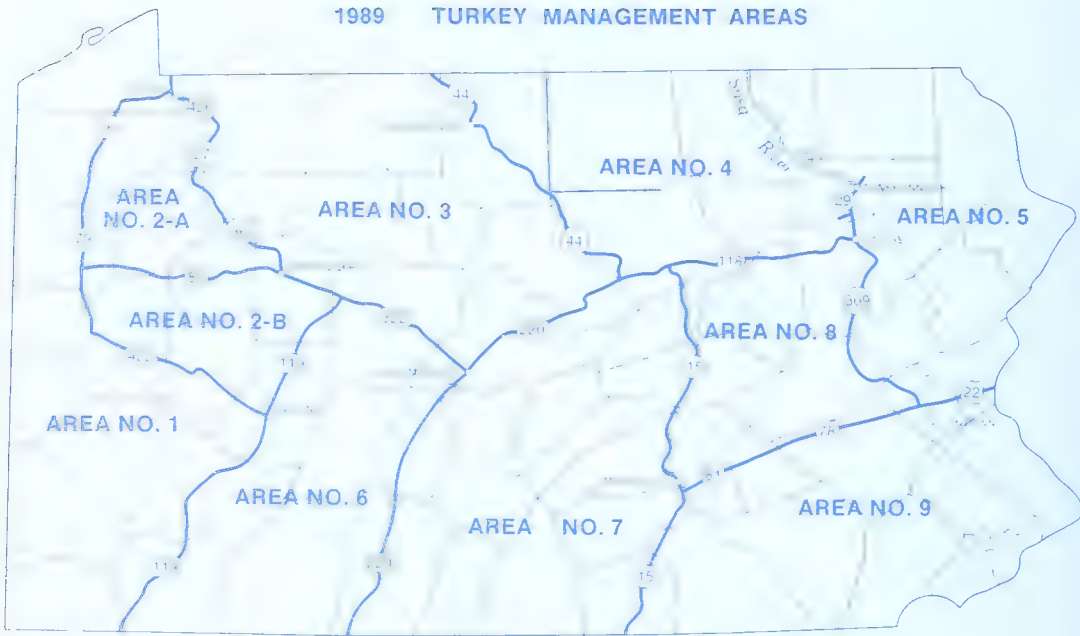
\*\*\* *Designated Area for Male and Female Pheasants*—East of Ohio and north of Interstate Route 80 to Route 220, north of Route 220 from Interstate Route 80 to Route 118, north of Routes 118 and 415 from Route 220 to Route 309, north and east of Route 309 from Route 118 to Interstate Route 80, and north of Interstate Route 80 from Route 309 to the New Jersey line. No pheasant hunting in Mercer County west of Interstate Route 79 and north of Interstate Route 80.

\*\*\* Bobwhite quail hunting permitted Oct. 28-Nov. 25 in all counties except Adams, Chester, Cumberland, Dauphin, Delaware, Franklin, Fulton, Juniata, Lancaster, Lebanon, Perry, Snyder and York, where the season is closed.

+ Turkey Management Area 1—Bounded on the north by Lake Erie; on the east and north by the New York State line, by Route 426 from the New York State line to Route 6, by 6 from 426 to I-79, by I-79 from 6 to Route 422, by 422 from I-79 to Route 119, and by 119 from 422 to the West Virginia State line; on the south by the West Virginia State line; on the west by the West Virginia and Ohio State lines.

+ Turkey Management Area 2-A—Bounded on the west and north by Route 6 from I-79 to Route 426; on the east by 426 from 6 to Route 27, by 27 from 426 to Route 36, and by 36 from 27 to Route 322; on the south by 322 from 36 to I-80, and I-80 from 322 to I-79; and on the west by I-79 from I-80 to Route 6.

+ Turkey Management Area 2-B—Bounded on the north by I-80 from I-79 to Route 322, and by 322 from I-80 to Route 119; on the east by 119 from 322 to Route 422; on the south by 422 from 119 to I-79; and on the west by I-79 from 422 to I-80.



- + Turkey Management Area 3—Bounded on the north by the New York State line; on the east by Route 44 from the New York State line to Route 220, and 220 from 44 to Route 322; on the south by 322 from 220 to Route 36; on the west by 36 from 322 to Route 27, by 27 from 36 to Route 426, and by 426 from 27 to the New York State line.
- + Turkey Management Area 4—Bounded on the north by the New York State line; on the east by the Susquehanna River from the New York State line to Route 29, by 29 from the Susquehanna River to Route 309, and by 309 from 29 to Route 118; on the south by Route 118 from 309 to Route 220, and by 220 from 118 to Route 44; on the west by Route 44 from 220 to the New York State line.
- + Turkey Management Area 5—Bounded on the north by the New York State line; on the east by the Delaware River; on the south by Route 22 from the Delaware River to Route 309; on the west by 309 from 22 to Route 29, by 29 from 309 to the Susquehanna River, and by the Susquehanna River from 29 to the New York State line.
- + Turkey Management Area 6—Bounded on the north by Route 322 from Route 119 to Route 220; on the east by 220 from 322 to the Maryland State line; on the south by the Maryland and West Virginia State lines; on the west by 119 from the West Virginia State line to 322.
- + Turkey Management Area 7—Bounded on the west and north by Route 220 from the Maryland State line to Route 15; on the east by 15 from 220 to the Maryland State line; on the south by the Maryland State line.
- + Turkey Management Area 8—Bounded on the north by Route 220 from Route 15 to Route 118, and by 118 from 220 to Route 309; on the east by 309 from 118 to Route 22; on the south by 22, I-78 and I-81 from 309 to 15; on the west by 15 from I-81 to 220.
- + Turkey Management Area 9—Bounded on the north by I-81, I-78 and Route 22 from Route 15 to the Delaware River; on the east by the Delaware River; on the south by the Delaware and Maryland State lines; on the west by 15 from the Maryland State line to I-81.



+ + *Special Regulations Area—Southwestern Pennsylvania—Allegheny County*—Only bow and arrow, manually-operated or autoloading shotguns not smaller than 20 gauge with rifled slugs or punkin balls and muzzleloading long guns may be used for taking deer in Allegheny County. Manually-operated .22 caliber rimfire rifles and handguns may be used for small game (except spring gobbler season), huntable furbearers, crows, and while trapping. *Special Regulations Area—Southeastern Pennsylvania*—Only bow and arrow, shotguns not smaller than 20 gauge with buckshot, rifled slugs or punkin balls and muzzleloading long guns may be used for taking deer in that part of southeastern Pennsylvania bounded by the following: Beginning at the Delaware River at Point Pleasant, southwest on the Point Pleasant Pike and Ferry Road to Route 413, northwest on Route 413 to Route 611, northwest on Route 611 to Route 412, north on Route 412 to Route 563, southwest on Route 563 to Route 313, northwest on Route 313 to Route 309, southwest on Route 663 from Route 309 to Route 73, west on Route 73 to Route 100, south on Route 100 to Route 30, west on Route 30 to Route 82, south on Route 82 to Route 1, west on Route 1 to Route 41, and southeast on Route 41 to the Delaware line, including Ridley Creek State Park, Delaware County, and Tyler State Park, Bucks County (muzzleloading long guns may not be used to take deer in Ridley Creek State Park or Philadelphia County). Manually-operated 22 caliber rimfire rifles and handguns may be used while trapping to dispatch legally-caught animals. While hunting, use or possession of single projectile ammunition at any time other than specified above is prohibited in both Special Regulations Areas.

## **GAMEcooking Tips**

### **TRAIL FOOD**

All outdoor activities seem to require a snack. Appetites often gallop out of control while hunting, hiking, or camping. Two of our long-time favorites for munching are homemade trail mix and wild game jerky. With just a little effort, these staples can be made at home economically.

#### **Homemade Granola**

- 2½ cups old fashioned rolled oats
- 1 cup shredded coconut
- ½ cup coarsely chopped almonds
- ½ cup sesame seeds
- ½ cup shelled sunflower seeds
- ½ cup unsweetened wheat germ
- ½ cup honey
- ¼ cup cooking oil
- 1 cup raisins

Roast rolled oats for 15 minutes in baking pan. In large bowl, combine oats, shredded coconut, almonds, sesame seeds, sunflower seeds and wheat germ. Bring honey and oil to a boil. Stir in oat mixture, spread out in 13 x 9 x 2-inch baking pan. Bake in 300-degree oven until light golden brown, 30 to 40 minutes, stirring every 15 minutes. Remove from oven, stir in raisins. Stir occasionally during cooling to keep from lumping. Store in jars or plastic bags. To store more than 2 weeks, freeze. Makes 6½ cups

#### **Wild Game Jerky**

- 1 pound bear or venison meat
- 1 quart warm water
- 2-3 cups liquid smoke
- 1 cup salt

Cut slices of meat (preferably hind-quarter, or other tender cuts) one and one-quarter inches thick. Freeze slightly for easier handling. Cut each slice into quarter-inch thick strips. Soak in a mixture of water, salt, and liquid smoke for ten minutes. Drain well. Put directly on oven racks, being careful not to overlap strips. Sprinkle with pepper to taste. Turn oven to lowest setting, and bake three hours. Turn oven off, and let meat stand in oven until all heat has gone. Store in airtight jars.

—FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY

# Fierce Flora

**"DO YOU KNOW** what Pennsylvania's problem is?" a friend asked. No, what? "We have no 'eat-em-backs' to hunt here." Eat-em-backs? "Yeah. They're the kind of critters that if you don't get them good first, they'll eat you right back—like lions and tigers and grizzly bears."

I definitely do not share that fellow's opinion. I'm very happy with the Pennsylvania wildlife situation just as it is. If I fall asleep under a tree while squirrel hunting, I don't want to have to worry about waking up in some large, toothy creature's stomach. Not that our black bears aren't long enough in the ivories to do it, but, though wild and wary, they are not aggressive. Every Pennsylvania bruin I've seen has skedaddled as fast as it could once it got a good whiff or look at me. I rather like it like that.

Of course, I'm respectful of wild animals' ability to do me damage. I take caution not to corner or handle something that has the potential to bite, kick,

gouge, or gore me, which is anything from a gray squirrel to a buck in rut. Worrying about Penn's Woods wildlife sneaking up behind me and having me for the main course is not a problem. I can't remember the last time I returned from a hunting trip with even a scratch from an animal encounter.

That isn't to say that hunting in Pennsylvania doesn't have its dangers. I've returned from many a hunt scraped, bruised, and bleeding, with holes in my hunting coat and rips in my pants. I've even lost my hat in the fracas. But it wasn't the fauna that got me, it was the flora.

Anyone who has hunted in park-like tall timber has either gone home empty handed or has had someone pushing out a nearby thicket for him. The truth is, almost all of the state's game, both large and small, thrive where the vegetation is nastiest. Wildlife likes to hide in greenery that is thorny, prickly, clinging, armed with spikes, tripping roots and grasping branches and, just occasionally, poisonous. Who needs big teeth when you've got friends like that?

While deer hunting last fall, I found a trail that skirted a sidehill around a swamp. From the deer sign and churned up mud, this was an I-80 for whitetails. I was marveling at the good fortune I had found underfoot, when suddenly I was attacked. "Owwwww!"

A wicked thornapple spike pierced my jacket and me as well. I twisted free and impaled myself on the next tree. "Yipe!" A third branch grabbed my hat and threw it to the ground. When I stooped to retrieve it, a fourth bloodied my cheek. I ducked low to get out of there and charged through an opening ahead. When I came up for air, I found myself not in the clear but in a black-

**POISON IVY** is particularly devious. Just when you think you've got its three-leaved appearance down pat, like one of the "Most Wanted" on a post office wall, it changes its alias and becomes a rather unremarkable woody vine.





berry bramble, and the fight started all over again. When it was over, except for some briars I had trampled flat, the casualties were all on my side.

The little known last chapter to the fable in which Br'er Rabbit gets so cunningly thrown back into the briar patch by Br'er Fox is that later that same day a hunter came by and plunged right in after him. Both Br'er Rabbit and Br'er Fox had a good laugh at that!

As if the sharp thorns and impenetrable tangles of blackberry and greenbrier aren't enough, wildlife views a mean mass of wild rose as a sort of game animal rest resort. Most hunters and their dogs call a stop before the wild rose. If there was ever a plant with claws, this is it. The ultimate offensive weapon award for a Pennsylvania plant, however, has to go to the hawthorn, with its armament of stilleto-like spines.

Just when you think you're out of the woods and safe in the fields, there's a trailing plant that hides along the ground and, just when you're in mid-stride, reaches up and yanks you down. "Aha, gotcha!" I don't know its name, but it's like living strands of barbed wire. I was always more interested in getting out of its grasp than in doing nature study. Everyone around here calls it "Wait A Bit Briar," because you always have to stop and "wait a bit" before it'll let you go.

There are other nasty plants that not only hold you back, but, when you do get free, they also tag along and give you more trouble at home. These are all the varieties of "stick tight," thistles, teasels, burdock and such. Stinging nettle is another nice one to bump into.

If I don't wear long sleeves and long

## Another View...

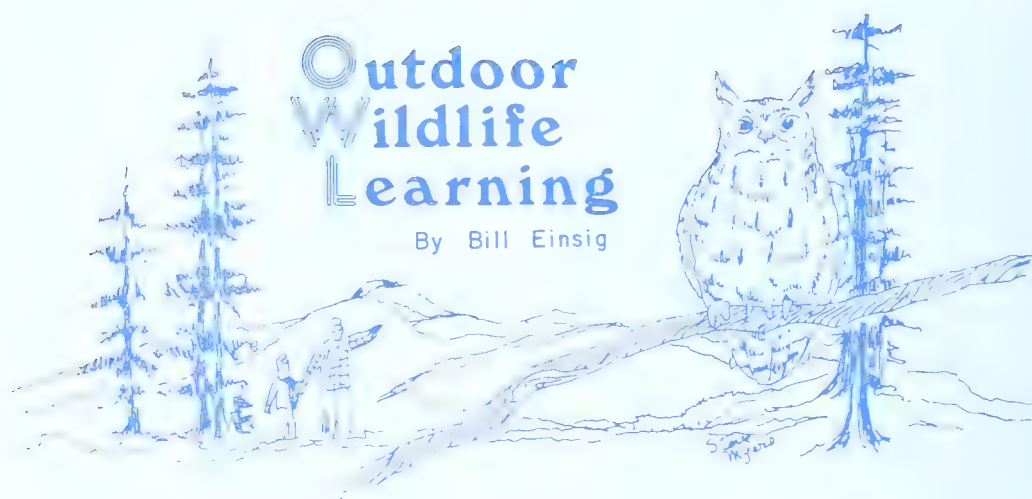
by Linda Steiner

pants afiel, even in the summertime, I come back with welts, scratches and rashes from something I walked through. If I'm not attacked physically, something gets me chemically. Poison ivy and poison sumac are best at this type of warfare. Ivy is particularly devious. Just when you think you've got its three-leaved appearance down pat, like one of the "Most Wanted" on a post office wall, it changes its alias and becomes a rather unremarkable woody vine.

I have an acquaintance who spent some time in Botswana, Africa. He brought back many interesting slides of his trip, including photos of wildlife. Every animal he showed seemed to have sharp teeth, tusks, horns, or claws. Even the fish had fangs. Then we looked at the scenery. The trees had thorns, the bushes had thorns, even the grass was like thorns. It looked as if you couldn't take a walk in the country without a gross of band-aids and a gallon of blood plasma. Here in Pennsylvania, at least, only some of the animals have fangs, only some of the plants have spikes. We do things in moderation . . . thank goodness.

### Bowhunters Festival

The Northampton County Federation of Sportsmen's Clubs is sponsoring a Bowhunters Festival, July 28, 29 and 30, at Bear Swamp, near Minsi Lake. Among this year's festival features is the renowned archer/showman Stacy Grosscup. Moving deer targets, 3-D targets and other shooting events, along with seminars and displays, will appeal to archers of all sorts.



**I**F YOU PACK for a vacation at the beach the way I do, the first thing into the duffle is a pile of carefully chosen books. While my family sprawls across the beach digging holes, chasing waves and catching rays, I seek out a quiet shady spot where I can read without distraction.

It's not that I dislike the beach—it's a fascinating place. But the summer beach is just too crowded, and I haven't reached the point where I enjoy sitting in blazing, blinding, burning sun while itchy sand clings to me and everything I brought along.

I like the beach best when everyone else has gone home and when the tidal wrack is left stranded on the sand. I like to explore the rock groins at ebb tide when no lifeguards are there to whistle me away. And, I'd much rather watch a loon, a diving osprey or a bunch of skittering sanderlings than the maze of towels, rafts and radios that greet us each summer.

Part of my fascination with the seashore is due to my own ignorance of it. The creatures I find have counterparts playing the same life roles in Pennsylvania's farmlands and forests. There are plants that make food and animals that consume them. There are predators and parasites; scavengers and opportunists.

The living conditions are so harsh and so extreme, however, that many niches are established where only highly specialized plants and animals can survive. Most of these are strange critters that I don't know. They make me grab for a book that not only tells me what they are, but also how they live and how they survive.

You may have your own books already chosen for this summer, but consider some of these as well. They can lead you

into a world as fascinating as any work of fiction.

**A Field Guide To The Atlantic Shore**, by Kenneth Gosner, is Number 24 in the Peterson Field Guide Series published by Houghton Mifflin Co. This classic handbook includes most of the aquatic plants and invertebrate animals you're likely to encounter on the Atlantic beach.

The heart of the book is a collection of illustrations and species descriptions aimed at helping beachcombers identify their finds. Because the field guide covers such a broad range of plant and animal species, most groups are not covered in great detail. For example, the section on mollusks covers the species most likely found on Atlantic beaches north of Cape Hatteras. More serious collectors will probably want a separate field guide just for molluscan shells.

The field guide also includes several introductory chapters on basic ecology, habitats, and environmental factors that create the scene for life at the sea's edge. Here, too, are practical suggestions on finding animals, collecting them and even on preserving specimens for later use.

Another "field guide" that will go to the beach with me is **Life in the Chesapeake Bay**, by Alice and Robert Lippson. While it's not a true field guide in the traditional sense, *Life in the Chesapeake Bay* does manage to illustrate and discuss much of the teeming life along the Atlantic shore and in the Bay itself.

The main difference in its approach is that it focuses on habitats first, animals and plants second. There are chapters on the life of sandy beaches, marshes, oyster bars and intertidal flats. The illustra-



tions are superb. They exhibit a warmth not usually found in more technical handbooks.

You'll find yourself reading this as a chapter book first. But later, you'll use it as a reference to learn more about the creatures you've just found. Expect this book to become a favorite, complete with dog-eared, highlights and copious notes you'll add with each trip to the shore.

Most of us visit the beaches on islands just off the mainland coast. Ocean City, Atlantic City, Wildwood, Stone Harbor, Chincoteague—all familiar resort towns built on fragile islands. From southern New England to the Florida Keys, our eastern seaboard is flanked by barrier islands that grow and recede with tides and storms. They are dynamic features that change their boundaries as sand is moved from place to place by wind and water.

**The Barrier Island Handbook** discusses these changes and the forces that cause them. It also confronts the problems caused by investors who build permanent structures on non-permanent sand. An investment in a cottage at the beach requires a never ending struggle to keep the beach where it is. Fighting nature, though, is a tough battle and it may be one we cannot win.

**All About Lobsters, Crabs and Shrimps and Their Relatives** is another interesting work by Richard Headstrom. This little book looks at the life histories and general biology of selected crustaceans. It's a good reference for the ama-

teur who wants to know more about the animals he finds at the beach.

Several chapters deal with very small creatures best studied with a good hand lens or a microscope. The bizarre structure and exotic biology of many of these animals rivals science fiction and should not be missed.

Finally, there's one more book about the beach that will interest teachers and parents of young children. **The Beach Book** is filled with ideas of fun, and educational, beach activities. It describes easy ways to make simple collecting tools and illustrates many of the creatures youngsters are likely to find, from lugworms to blennies to brant. Some of the ideas are easy to use on an evening beach walk. Others are reminders of projects that could be done at home with materials collected from the beach.

#### Ordering Information:

*A Field Guide to the Atlantic Seashore*, Kenneth Gosner. Houghton Mifflin Company, 1978. \$11.95.

*Life in the Chesapeake Bay*, Alice and Robert Lippson. The Johns Hopkins University Press, 1984. \$12.95.

*Barrier Island Handbook*, Stephen Leatherman. The University of Maryland, 1988. About \$7.50.

*All About Lobsters, Crabs, Shrimps and Their Relatives*, Richard Headstrom. Dover Publications, Inc., 1979. \$3.95.

*The Beach Book*, Western Education Development Group, The University of British Columbia, Vancouver. Price unknown.

## 3 PGC Officers Make Governor's 20

**T**HREE Pennsylvania Game Commission officers finished in the Governor's 20 for 1988. The Governor's 20 consists of the top-scoring handgun shooters among the state's law enforcement officers.

Dauphin County Wildlife Conservation Officer T. R. "Skip" Littwin finished 11th in the top twenty, with a 1464.25 average; Cameron County Wildlife Conservation Officer C. J. "Joe" Carlos finished 12th, with a 1463.5 average; and Lancaster County Deputy Wildlife Conservation Officer Steve Hess finished 15th, with a 1454.5 average. A 1500 would be a perfect score.

All three officers have National Rifle Association "master" handgun shooting ratings, the second highest classification. The course consists of 150 rounds of practical police or survival, combat-style shooting in at least four different Pennsylvania Police Combat Association-approved matches in a year.



**By Jack Weaver**  
Wildlife Conservation Officer  
Centre County

**S**OME SAY they're ready after the wild strawberries are ripe. Others claim deer aren't good until after the Fourth of July. The town of Elkland, Tioga County, even had its own prophet on this issue. Sometime late in June some of my "preferred customers" would gather at the local watering hole where this character usually hung out. He'd be sitting at the bar, contemplating the fate of the deer herd in his suds, when somebody would ask, "Well, Slick, is it time to start shootin'em yet?"

"Naw, not yet," he would reply. Sometimes that would be it. But at other times, often on a Friday night, when a crowd would gather around his stool, he might launch into a detailed explanation. "You see, boys," he might say. "Been a hard winter. Winter like this the deer get to feedin heavy on mountain laurel. That makes the meat strong and stringy. Seen it so strong sometimes you can't stand the smell of it cookin. And some of ya with false choppers wouldn't be able to chew it. Naw, boys, ya gotta give em time to work that laurel outta their systems." Some years he might go into detail about how there was a late fawn crop. "They just ain't any good until they get them youngun's weaned. They pull a doe down—makes em scrawny."

Then, perhaps on a Saturday night,

usually sometime in July, someone would come in and yell, "Hey, can we get us a deer yet?"

Slick would spin slowly around on his bar stool. A hush would fall on the place. The bartender would turn the jukebox down, someone would yell at the women to stop dancing, and folks would gather around his stool. And Slick, looking as sober as he could, would kind of nod his head. "Yep, boys," he would say quietly, "They're ready." Then the revelry would break into full swing; the guns would begin to crack at night along that section of the northern tier; and we'd go out in force.

But places are different. In Centre County there is no recognizable closed season for deer poaching. Even as I'm writing this, in mid-February, I just received reports of people shooting deer at night around here. A number of years ago, in May, we found the entrails—including the unborn fawns—of six does. There seems to be no honor among thieves here. I'm not talking about sportsmen, of course. But every segment of society will always have its share of low-lives. Seldom are the culprits apprehended in the actual act of poaching a deer. It's hard to be at the right place, at the right time, especially on an eight-hour a day schedule. Rather, most prosecutions for jacklighting and other violations occur because of concerned people getting involved. Sometimes we get help from local police and other law enforcement agencies, but most often it comes from private citizens who aren't afraid to stand up against what they believe to be wrong. Here are just a few cases that occurred like this over the years during the month of July.

It was a typical hot July night in '73. The phone woke me about 12:45 in the morning. A Blossburg police officer was calling to say he had just received a report about a lone shot being fired up on the Blake Road, just outside of town. Blake Road runs along the west ridge of Armenia Mountain, more or less between the towns of Morris Run and Blossburg. There are several homes up there, and camps and old fields. It was one of several popular poaching spots. There are only three ways in and out of there. One way winds down past the Blossburg dump directly into town. I asked the officer to watch this road and stop anyone coming down. I had a county control radio in my vehicle at that time, which allowed me to



talk directly to the local police and other county law enforcement officers. Such direct communication made for a super spirit of cooperation between the Game Commission and local officials, which paid off time and time again.

Next I called Deputy Ed Signor, in Arnot, and asked him to zip over and watch the second exit, which leads into the village of Morris Run. That done, I finished dressing and hurried to the third entry, behind the old Blossburg hospital. I drove right on up the mountain and slipped in behind a camp where I could watch some adjoining fields near where the shot was reported to have come from. I was hoping that whoever shot the deer hadn't picked it up yet—which is often the case.

Before long Ed Signor called on the radio and said he had stopped a pickup and thought I'd better come on over. When I arrived I saw three men standing outside the truck. Their heads were down, a sure sign that they were guilty of something. When I got out, Ed hollered at me to check the back of the truck. Blood was running out from under the tailgate. (The signs were getting better all the time.) Inside the truck bed stood a cardboard drum. I asked one of the men what was in it. He just shrugged. I looked at Ed and he flashed me a big grin. (Two more good signs.) Inside the drum was the head, hide and entrails of a freshly killed buck. The men were on their way to dump out the evidence when Ed stopped them. We had a minor problem, though; they said they didn't shoot the deer on the Blake Road. In fact, all three signed statements that they had shot the deer on another road. We picked up the meat where one of them lived, and then they took us over to a spot on the Ogdensburg Road where they said they had shot the deer. Sure enough, there was a blood spot where they claimed they loaded the carcass in their truck. We never did find out who fired the shot on the Blake Road, but these guys sure picked the wrong spot to dump the remains of the deer they had shot.

A year later, on July 23, I received a call about 5:45 in the morning, from a farmer in Covington Township. He said that someone had just shot at some deer in his field. When I arrived the farmer described the car as a '64 or '65 blue Ford convertible, with a white top and damage to the rear end. Although he didn't get a license



**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by **GAME NEWS** readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from **GAME NEWS** office.

number, the car was unusual enough that we decided to search for it.

We found no evidence that a deer had been hit, but we did find three spent 22 rimfire cases along the road. Poachers favor rimfires because they are relatively quiet. Unfortunately they also cripple a lot of deer. Over the years I've had quite a few legally harvested deer turned in during hunting season that were unfit for consumption because of gangrenous wounds from 22 bullets.

Again, thanks to good working relations with local law enforcement agencies, an area search was made for the suspect car. About 2 p.m. the county dispatcher called to report that Chief Davis of the Blossburg Police had located it. A search of the car produced a 22 semi-automatic rifle. When the car's owner was shown the three empty cases found at the scene he confessed.

We have regular forms for signed confessions, but I was unable to locate mine at the moment, so I had the defendant sign a written statement of guilt on the back of a Cooperative Farm-Game Project Agreement form. It was a fitting epitaph, considering it was a Farm-Game cooperator who had turned him in. The

poacher was fined \$100, lost his hunting privileges for three years, and we confiscated the rifle. Today, the same offense would cost \$1600, three years revocation, and loss of the equipment, including, possibly, the car.

He had come to camp to relax and was

## Fun Games

### “A Lesson In Wildlife Basics”

By Connie Mertz

Fill in the missing letters to answer the definition on the right.

\_\_\_ R \_\_\_

group of young birds

\_\_\_ T T <sub>14</sub> \_\_\_

group of young mammals

C <sub>12</sub> \_\_\_ H \_\_\_

wildlife food hidden or stored to be eaten later

<sub>9</sub> \_\_\_ S \_\_\_

forest tree nuts — acorns, hickory, beechnuts, etc.

\_\_\_ U \_\_\_ L

active mainly in the daytime

\_\_\_ C <sub>18</sub> \_\_\_ R \_\_\_ <sub>5</sub>

active mainly at night

\_\_\_ A <sub>4</sub> \_\_\_ R

animal that feeds on other animals

H \_\_\_ B \_\_\_ V \_\_\_

animal that eats green plants

O <sub>15</sub> N \_\_\_ R <sub>8</sub>

animal that eats both green plants and other animals

\_\_\_ B <sub>2</sub> \_\_\_ T

food, water, cover, shelter, space

Now place the letters with corresponding numbers on the indicated spaces below and then fill in the remaining spaces to find the method used by biologists to preserve and manage game and nongame species.

\_\_\_ <sub>2</sub> \_\_\_ <sub>4</sub> \_\_\_ <sub>5</sub> \_\_\_ <sub>8</sub>

<sub>9</sub> \_\_\_ <sub>12</sub> \_\_\_ <sub>14</sub> <sub>15</sub> \_\_\_ <sub>18</sub>

answers on page 64



out taking a walk in the evening when he heard the shot. It sounded close, maybe just over the hill from where he was. He thought he saw a spotlight ark briefly in the night sky ahead of him. As he topped the knob of a reverting strip mine he saw three young men carry the limp form of a half grown fawn toward a waiting Toyota pickup and toss it in the bed. Laughing, the men climbed in and drove off. The man then made a special trip into Snow Shoe to call me. I, in turn, called Deputies John Askey and Joe Feidor and asked them to meet me in Snow Shoe. Together we drove to where this violation occurred.

Somewhere along the line we got wind of a beer party that was supposed to be going on at a camp near Kato. Kato, is one of those old mining ghost towns that prospered back in the early 1900s. Today only the remains of the coal tippie, the railroad bed and one building, now a camp, lend credence to the old town's better days. Kato is located along Beech Creek, between Clarence and Orveston, in the middle of nowhere. The camp in question was just upstream.

We parked some distance away and walked in. We didn't want anybody to see us coming and hide the evidence. There were several vehicles parked in the yard, including a Toyota pickup which matched the description of the one we were looking for. Rock and roll was blaring inside, and several people were milling around on the porch. The deputies and I walked up to the young men on the porch and announced who we were. As we were talking we could see the hind quarter of a small deer lying on a table in the kitchen. Meat, which turned out to be venison, was cooking on the stove. When evidence like this

is in plain view a search warrant isn't necessary. We rounded everyone up. Most appeared to have been drinking. All but two were underage, and three were juveniles, under 18. Two of the juveniles were girls. But we weren't case workers or police officers. We were game protectors and our primary concern was the illegal deer. Besides, everybody was being completely cooperative so there was no need to call anyone else in. Which, by the way, was why they were all so cooperative. There were ten persons at the camp when we arrived. Eight of them were either directly involved with the killing, skinning, and cooking of the deer, or else were present the whole time this was going on. They were all charged. Two of the boys had arrived only about 15 minutes before we did. They were given warnings and let go. Four of the boys who were actually engaged in the killing of the deer settled the \$200 fine on field acknowledgements of guilt. They also lost their hunting privileges for three years. The remainder were found not guilty at a hearing before the local magistrate.

All in all, it slowed things down for a while around Snow Shoe. Slowed it down, but never stopped it altogether. Poaching has always been going on and will continue long after I'm gone. Meanwhile, maybe we can keep the violators looking over their shoulders, and with the continued help of concerned citizens, every now and then strike a solid blow for the protection of our wildlife resources. Perhaps, with mutual cooperation, we can keep the lid on these kinds of activities and achieve the Game Commission's goal of reasonable compliance with the wildlife laws of our Commonwealth.

## *Books in Brief...*

(Order from publisher, not from Game Commission)

**Sporting Clays**, by A.J. Smith, Willow Creek Press, P.O. Box 300, Wautoma, WI 54982, 156 pp., \$19.50. One of the first books on today's fastest growing shooting sport—sporting clays. The author, a champion clays shooter in England, covers the game and the techniques in a clear and concise manner.

**Antique Guns, The Collector's Guide**, by John E. Traister, Stoeger Publishing Co., 55 Ruta Court, South Hackensack, NJ, 07606, softbound, 272 pp., \$14.95. A detailed guide for identifying and determining values for pre-1900 firearms—handguns, shotguns and rifles. Covers many of the firearms that collectors are interested in, including some of British, Belgian, French, and other manufacture. There is also a black powder replica section and a listing of obsolete cartridges with basic technical data.

**T**HE TOWN OF West Chester has streets named Spruce, Poplar, Mulberry, Cherry, Walnut. No Hackberry Street. On the corner of East Ashbridge and North Franklin streets, there is no towering state champion hackberry; no hackberry at all. Maurice Hobaugh, in his tan-and-green Pennsylvania Bureau of Forestry uniform, drove around the corner, pulled the forest-green Plymouth Reliant into a driveway, backed out, and cruised the corner again. We both stared up through the tinted windshield. No hackberry.

Hobaugh, nicknamed Duke, is a short, sandy-haired, energetic man who looks a decade younger than his 59 years. He is the forester in charge of the Valley Forge Forest District, which encompasses the Philadelphia area. He is also an enthusiastic tree hunter with 13 state champions and co-champions to his credit.

"No hackberry here," he said. He had a twinkle in his eye. "I'd guess it used to stand right there." He pointed at a depression in the lawn of the large, well-kept house that occupied the corner. "Let's go find out."

The woman who answered the door was Mrs. Alderfer, the wife of a doctor. "In 1979 and 1980 we lost it," she said,



"half one year and half the next. Windstorms. We were very unhappy. It was like losing a family friend."

As Hobaugh and I drove away he said, "That hackberry shows why you shouldn't hesitate to nominate a big tree, even if it doesn't quite measure up to the current champ. Lightning, disease, winds—these are old trees, and old trees die." The traffic was stiff outside West Chester. "So you and Ted Grisez found a big hackberry," he said.

"Maybe it'll be the new state champ," I said.

"Well, last year I turned in a hackberry that scores 293. Yours was what, 230? Mine's in Thomasville, over in York County."

Hobaugh drove vaguely northward. We were out to look at champion trees, those found by Hobaugh and by others, and to prospect for new champs. "It's a hunter's instinct," Hobaugh said. "When I get close, I can almost smell 'em."

Hobaugh has been hunting big trees for more than ten years. His 13 current Pennsylvania champions and co-champions include the American beech, pendant silver linden, bald cypress, American sycamore, yellow poplar, white ash, blue spruce, Douglas fir, and—if no one else has sent in a bigger one—hackberry. He said, "There are champions just waiting to be discovered that people walk past every day."

We checked on a tree Hobaugh had been wanting to measure. It stood at the intersections of Grove and Boot roads, just beyond the stone fence surrounding the cemetery of Grove United Methodist Church. The tree was an oak—Hobaugh thought a black oak, but he wanted to be sure. He took from the car's trunk a Pulaski, a long-handled axe-hoe combination used for fighting forest fires. With the tool's ax blade he scraped off a small patch of outer bark. "This doesn't hurt the tree one bit." The exposed inner bark was bright orange. "Yep, a black oak," Hobaugh said. "If it was a red oak, the inner bark would be pink."

He measured the girth, an impressive 17 feet. "Current champ is sixteen-



seven," he said. Then, striding through a break in traffic, he taped his way across Boot Road, back between two white-painted houses. People looked at him suspiciously from passing cars. Hobaugh sighted through a relaskop, and informed me, a note of disappointment in his voice, that the black oak was only 90 feet tall; the current champ, in Ridley Creek State Park, is 126 feet tall. "Right away it's got us by 36 points," he said. The reigning champion scores 340; this challenger, at 325, is five points shy of co-champion status.

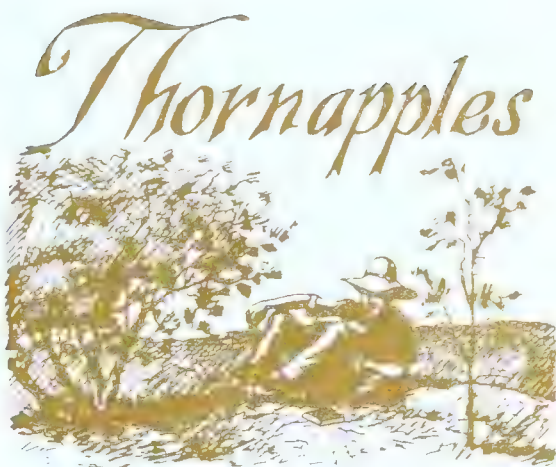
Before leaving, we explored the graveyard the oak overspread. Tombstones listed death dates of 1848, 1815, 1795. Hobaugh paused and looked at the oak, its thick black branches twisting into the hazy August sky. "That tree could easily be 250 years old. It was probably standing before any of the people buried here were born."

We packed up our tools and notebooks, got back in the Plymouth, and drove on.

### Alive In 1681

Of the longer-lived species—maples, hickories, oaks—most of today's champions would have been alive in 1681, when William Penn founded his New World colony. "Pennsylvania" means "Penn's Woods," and some 60 percent of the state remains forested today. In southeastern Pennsylvania, where many acres were cleared for agriculture, the original farms and much of the remaining woodland have been washed over by settlement: a church built next to a tall oak, a school, a manor house—a condominium, a Wendy's. Some of today's big trees were planted; the so-called Rodman sycamore, for instance. This giant, which grew to have a 29-foot girth, was said to have sprung from a riding crop that William Rodman stuck in the ground beside his house in 1745. The Rodman sycamore reigned as a state champion until a storm felled it in 1984.

Then there are the paulownias and corktrees and white mulberries and Siberian elms and silktrees and Scotch pines and giant sequoias and ginkgos



Chuck Fergus

and katsura trees and cutleaf European beeches, planted in colonial yards, gardens, and arboretums. These ornamentals appear in the Pennsylvania record book, causing a certain amount of friction among tree hunters.

"I'd rather not see anything in the book that wasn't a native," Hobaugh commented. I remembered Ted Grisez, another tree hunter, saying much the same thing: he favored limiting eligibility to species in the *Checklist of U.S. Trees (Native and Naturalized)*, published by the U.S. Department of Agriculture. Under this setup the Scotch pine, which has been naturalized and widely planted and which reproduces in the wild, would be eligible, while the cedar of Lebanon and the Chinese toon would not. "We don't need all of these freakish exotics," Hobaugh went on. "In my opinion it waters down the program." In the opinion of other tree hunters, it expands the possibilities. Walk into the far corner of an arboretum, find a tree (usually neatly labeled) of a type no one else has measured, and claim a state champ.

Hobaugh drove down an oak-canopied street, heading toward Tyler Arboretum, where he has the champion bald cypress ("It's an American tree," he explained) and co-champion yellow poplar, a species also known as tulip tree and tulip poplar.

The yellow poplar was tall, massive, and utterly straight: you could drop a

For information on Pennsylvania's Big Tree Program contact the Pennsylvania Forestry Association, 410 East Main St., Mechanicsburg, PA 17055-6594.

For a tree to be considered for the program, three measurements are required: trunk circumference in feet and inches; vertical height to the nearest foot; and average crown spread to the nearest foot.

It's not too difficult to measure trunk girth and crown spread; a 50-foot tape measure will suffice. Height is another story. Total height of a tree is considered to be the distance between the base of the trunk and the topmost twig. The most reliable measurements are made with devices such as an Abney hand level, a Forest Service hypsometer, or a transit. If none of those is available, you can use a straight stick. Hold the stick vertically and at arm's length, making sure that the length of the stick above your hand equals the distance from your hand to your eye. Staying on level ground, move away from the tree while sighting the trunk's base over your hand. Stop when the top of the stick is level with the top of the tree. You should be sighting over your hand to the tree's base, and, without moving anything but your eye, sighting over the top of the stick to the tree's top. Measure how far you are from the tree, and that is its height.

plumb bob from the center of its crown to the center of its trunk. The hoary bark was deeply furrowed. The roots, before they plunged into the ground, were thick as drums. The leaves, with their distinctive notched ends, caught the sun like a thousand mirrors. Hobaugh and I and one other person could not have joined hands around the trunk.

"Now *that's* the kind of tree that ought to be in the book."

The pioneers were said to have made canoes from yellow poplars like this one, hollowing out a single log; in such a craft 60 feet long did Daniel Boone transport

his family down the Ohio River into Spanish territory, out of Kentucky.

"Every time I see that tree, I stand in awe."

The yellow poplar seemed sentient, brooding, looking down upon the road. It was not difficult to imagine the road as a deer path, then a foot trail traveled by Indians, then a dusty thoroughfare choked with drovers and canvas-topped wagons and carts. Now, a blue Isuzu Trooper drove past. Donald Culross Peattie, describing the yellow poplars growing on the site of a long-vanished plantation in Virginia, called them "giants of longevity, speaking . . . in many-leaved, elegaic voices, of how mayfly were the bright and vanished humans they knew." The yellow poplar at Tyler Arboretum is 19 feet 1 inch around the trunk. It is 136 feet tall. Spread, 85 feet—386 points.

### Champion White Ash

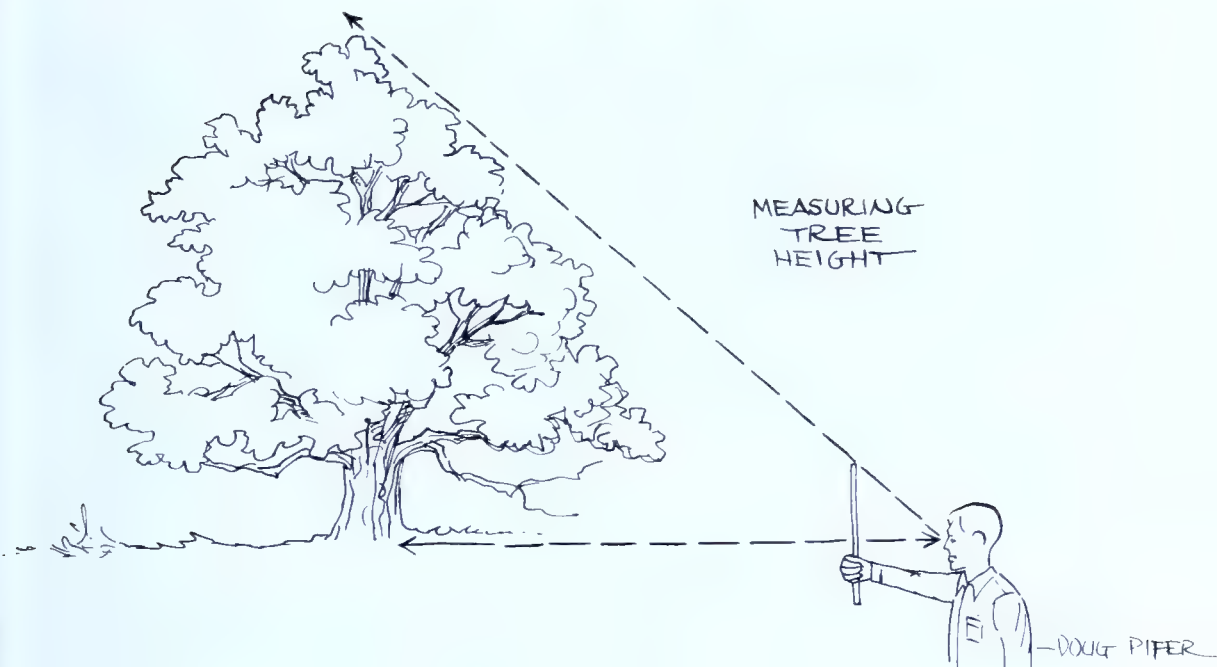
During my time with Hobaugh, we saw his champion white ash (379 points), next to a stone mansion at the end of a long tree-lined drive. The ash had a lightning rod fixed to its crown; from the rod, a greenish-blue braided-copper wire led to a spike in the ground.

We visited one of four state co-champion white oaks, on the grounds of Wernersville State Hospital, a mental institution. The tree was an open-grown thick-armed specimen whose health had recently been restored by a pruning, arranged by Hobaugh, and done for free, by a local arborist. The tree was vast. It seemed to have planes, as a mountain might have forests and meadows. Sunlight played in one part of the tree, then another; cicadas buzzed loudly—374 points.

We spotted and measured a Japanese pagoda tree growing in a yard in Bryn Mawr. At 323 points, it perhaps would displace the current champ, which, when last measured, scored 301. "Well," said Hobaugh, "if everybody else is going to be sending in these darned exotics, I might as well, too."

The last tree we searched out was a chinkapin oak west of the town of Oley





in Berks County, not far from the spot where Daniel Boone was born. The oak has reigned as state champion for its species since 1941. Its circumference is 20 feet 3 inches. It is 84 feet tall. Its crown spread exceeds 120 feet—in area, about a third of an acre—357 points. The tree, said to have been revered by the Leni Lenape Indians, grew in a damp hollow surrounded by a thicket of shorter trees and a carpet of poison ivy.

Before viewing the oak, we got permission from the old woman on whose farm the tree stands. She had been sitting in front of her house, in a battered Dodge Coronet 500, eating popcorn. Hobough pulled up next to the car, and we conversed through the open windows. The old woman was heavyset, with thinning gray hair. She wore a faded green dress. She had lived on the farm for 40 years; now she was alone, her family grown and gone, the barn ramshackle, the fields leased. She

hoped to sell the land for a housing development, should a buyer be found.

I asked what it was like, having the state champion chinkapin oak in her back yard.

She frowned slightly and did not speak for a moment. "It's a headache," she said. "People wanting to see it, comin' around and all."

I asked if she had good memories of the tree—had her children played under it, her family held picnics or reunions under its spreading crown?

"No," she said. "You used to be able to drive right up to it, though." She put some popcorn in her mouth. The popcorn was bright yellow; it looked dyed. "It doesn't mean anything," she said, "having that tree. It doesn't mean anything at all."

(This is the second part of a two-part article that originally appeared in *Country Journal* magazine.)



**TOP WINNERS** in the archery division of Weaknecht's contest are, left to right, Randy Yasenchak, third; Scott Wenger, sixth; Craig Krisher, first; Terry Hall, second; and Mike Bauer, fourth. Randy Carl, whose trophy finished fifth, was not present.

**Promoting the . . .**

## Two Season Hunter

**By Keith C. Schuyler**

**D**ICK WEAKNECHT? The name was easy enough to remember, and I knew he had to be somewhere in the southeast Dutch country. But where and when . . .?

"Yeah, we hunted with the bow together years ago, in Lycoming County," said Dick, shaking his head and scratching thoughtfully under the black, spangled, wide-brimmed hat that is his trademark. "It goes way back."

We let it go at that and rested our memories. When hunters shed their camouflage for street clothes, and after some years maybe change their hair line as well as its color, it isn't always easy to put names and faces together. But I wanted to know more about a promotion that attracted more than 4000 hunters to Weaknecht Sporting Goods

in Hamburg, Berks County, for a big buck contest. Especially because more than 3000 of them were bow hunters in season.

Dick and I met at the Eastern Sports and Outdoor Show in Harrisburg and made plans to get together at the Outdoor Show in Hamburg later in February. An antler measuring session would be held there as culmination of an afternoon archery program. Important to participants were \$3000 in prizes to be spread among the winners in combined bow and gun categories.

Although Dick's sporting goods store in Hamburg caters to sportsmen in all categories of outdoor activities, he personally operates a "basement" establishment at his home in Kutztown, about 11 miles southeast, as the crow flies. He



**CRAIG KRISHER, Allentown, took this big non-typical whitetail last year in Lehigh County. Several Pope and Young measurements have the trophy scoring between 198 and 209 points.**

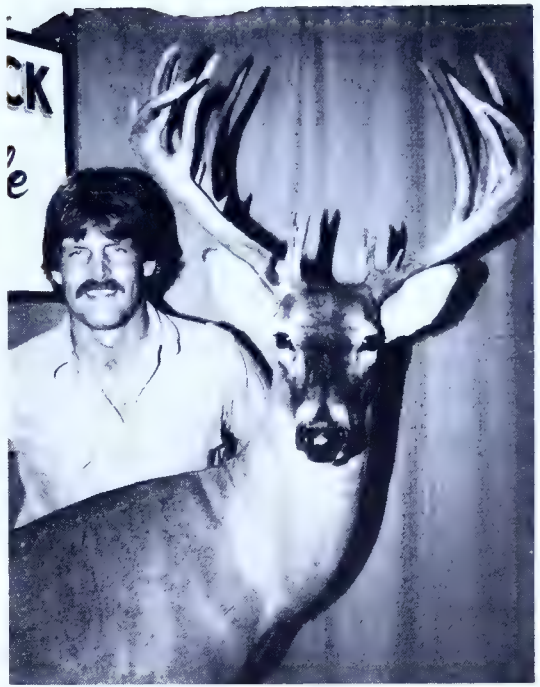
started making arrows there about 25 years ago, and has since developed it into one of the largest archery sales operations in the state. Assisting him there is his son Rich, who primarily handles the wholesale end of the business. Some 10,000 catalogs are distributed each year to spread the word.

Although Dick started his business making wooden arrows, about 95 percent of his demand today is for aluminum shafts and plastic fletching. These days it's primarily youngsters just getting started in the sport who choose wood. According to Dick, good cedar for shafts is scarce, believed so because of Japanese purchases of the wood in large quantity. Plastic vanes are more common today, too, largely because good feathers are increasingly difficult to obtain.

For many years archery was chiefly a sideline for Dick. He worked as a core maker at a local foundry. Closing of the plant in 1986, however, provided a reason to devote all his time to the archery business that had been providing employment for his two sons.

Jim Weaknecht is in charge of the new Hamburg store, a six-year-old business that expanded to its present location in 1988.

I'm always leery of big buck contests, especially when there are entry fees and huge cash prizes. Such incentives encourage all sorts of undesirable dodges to claim the money. Most local contests, however, are innocent promotions that create only friendly competition and attract only those who don't need any urging to fill their tags. No fee was needed to enter the Weaknecht sponsored venture. All those who purchased hunting licenses at his new store were automatically entered in the contest. Prizes were offered not only for the biggest deer taken with bow and gun, but also for the best antlers taken by a muzzleloader.



What attracted my attention was that more than three out of four who bought hunting licenses also bought archery tags.

Although it didn't take much to enter the contest, the awards were nothing to be sneezed at. Kehr's Taxidermy came up with a Bear Bruin Compound bow for the top archery antlers, and a 30-06 Sako Hunter was offered for the best gun-taken trophy. In addition, both winners were to receive a free shoulder mount of their deer.

### Other Prizes

Other prizes, from Weaknecht, bringing to a total of six for each category in order of antler size, included a PSE Fire Flite Compound, Golden Eagle Super Hawk Turbo Cam, Bear Flare II Compound, Golden Eagle Super Hawk, and Loc-On Tree Stand for archers. For gunners, a Remington 7600 30-06; Winchester 94, 30-30 lever action; Mossberg 500 12-gauge; Marlin Model 25 22 caliber rifle; and a 12-foot Warren and Sweat Tree Stand. So nobody went home empty handed, all those who entered a trophy received a cap, buck lure and a wallet.

In all, 132 sets of antlers were entered in the contest. Of those, 57 were sub-



**TED MILLER, Gerry Gerner, Mark Kaufman and Ralph Renno, left to right, helped arrange the Hamburg Outdoor Show. Proceeds from the event went to the Union Fire Company.**

mitted by archers. For measuring, entries were culled to 15 for bowhunters and 20 for gunners. These were the racks deemed most likely to win among the top six in each category. Not submitted at all were sets of small antlers and spikes that the owners were certain would not qualify for prizes.

Top winner in the archery category was, to nobody's surprise, Craig Krisher, Allentown, who had registered the non-typical whitetail he took on the first day of the 1988 season. Although the rack had been variously rated at 21 and 23 points, and had Pope and Young scores ranging from 198 plus to 209, it was nonetheless undoubtedly the contest winner. Although it had been previously agreed that the top buck in the contest would be measured as a typical rack, regardless of confirmation, Krisher was a winner by any measure. The full body mount of his deer was displayed as a feature of the sportsmen's show. He shot the animal in Lehigh County, with a Jennings Unistar.

To score the remaining archery entries, a team of official Pope and Young measurers had been provided from New York State by Golden Eagle Archery Company. They were Keith Jennings, Rick Heath and Toby Heath. Scorers for gunners were Sherwood Schoch, Douglassville, and Jim Rowe, Harrisburg, with the assistance of Forrest Scheffer, Kutztown.

Scoring started at 4:00 p.m., when much of the growing crowd at the Hamburg Field House of the Union Fire Company gravitated toward the corner of the spacious building where shooting demonstrations were also being held. Actually, this show marked the revival of one conducted as a commercial venture by Luke Fetter for four years through 1986. Fetter discontinued the effort for health reasons.

It was on hunting and fishing excursions that four Hamburg residents discussed revival of the show to benefit the Union Fire Company. The team, consisting of Ted Miller, Gerry Gerner, Mark Kauffman and Ralph Renno, made plans to again hold the event in 1989. They credit Jim Weaknecht for considerable help in putting it together. A total of 48 exhibitors signed up, ensuring a variety of presentations for the audience. Excellent weather helped bolster attendance. Plans were immediately made to continue the show and the big buck contest in 1990.

Gene Swavely conducted the archery demonstrations by members of Kempton Rod and Gun, which has both outdoor and indoor ranges for its 1100 members. All types of hand-drawn bows were utilized, from modern adaptations of the ancient longbow, through the once popular recurve, to the current compound bows.

It was after 7:00 p.m. when the last set of antlers had been measured, and expectant deer hunters and their families jammed the area. Terry Hall, Lenhartsville, came out second among archers with a respectable 114 $\frac{6}{8}$  rack





**DEMONSTRATIONS** featuring all type of bows, from the ancient longbow and once popular recurve, to the current compounds, were coordinated by the Kempton Rod and Gun Club. Note the arrow in flight.

that had a spread of 21 inches and eight points. It was taken with a Golden Eagle in Berks County. Randy Yasenchak, Giardville, claimed third with his 8-pointer that scored  $93\frac{5}{8}$ , and was shot with a Jennings bow in Columbia County. Fourth was Mike Bauer, Boyertown, whose 8-pointer was shot with a Bear bow in Berks county and scored  $91\frac{1}{8}$ . An 8-pointer took fifth with a score of  $90\frac{7}{8}$ , for Randy Carl, Topton, who downed it with a Golden Eagle in Berks County.

As might be expected, gun hunters did somewhat better on average, with Delman Balthaser, Virginville, scoring a whopping  $143\frac{5}{8}$  for his 10-pointer with a  $19\frac{1}{2}$ -inch spread. Second was Glenn Kubany, Olney, Md., a 9-pointer scoring 126.3; third, Craig Richards, Leesport, 9 points, at 119.7; fourth, Harry Hartman, Hamburg, 118.5; fifth, Michael Straight, Kutztown, 117.4. The last two



racks each had 8 points. All of the rifle-shot deer were taken in Berks County.

Chris Henry, Virginville, claimed the Warren and Sweat, 12-foot tree ladder for muzzleloaders, with his 7-point, 14-inch spread buck—taken in Berks County.

Hunters don't give up easily in that part of Pennsylvania—whether it is with the bow or the gun. Of the top 11 bucks scored, nine were shot in Berks County.

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**WCO GREG HOUGHTON**, Emigsville, York County, received the "Outstanding Wildlife Officer of the Year Award" from the Northeast Conservation Law Enforcement Chiefs Association. Houghton, a native of Cincinnati, Ohio, was graduated from the agency's Ross Leffler School of Conservation in 1982. Prior to his Game Commission service, he served as a police officer and as a game warden for the California Department of Fish and Wildlife. Congratulating Greg on his award here is Southeast Region Director Charles "Jim" Williams.





**FOR DECADES** the 30-06 has been a most popular cartridge among hunters and wildcatters, largely due to its great versatility. With a wide array of bullets available, the 30-06 is suitable for everything from woodchucks to grizzly bears.

## The Octogenarian

**By Don Lewis**

**Photos by Helen Lewis**

**I** DON'T RECALL the exact year, but I'll never forget the weather as long as I live. It was cold. Fresh out of the military, I had little in the way of big game hunting gear or clothes. In fact, only my feet were warm, and that was because I was wearing the old style felt shoe pacs inside 5-buckle galoshes. I had borrowed them from a friend, along with the ex-military rifle I was carrying.

By 9:30 of the season opener it was obvious that the biting wind and freezing cold were too much for my rabbit hunting coat. Worse yet, there was shooting all around me, but I hadn't seen even a tail. It was doe season, and I was hunting in an area that was said to be overrun with deer. I shook and shivered for another hour and then headed

for the car. The shooting seemed to increase, but the landscape for me remained void of deer. Not only was I nearly frozen, I was also plenty disgusted.

It wasn't yet noon, but I drank some hot coffee and ate a sandwich while the heater poured out bone-warming hot air. Suddenly, deer were running on both sides of the road. I jumped out of the car, grabbed my rifle, and raced toward a woods over 100 yards away, loading as I ran. By the time I got there my lungs were aching for air. Before I could regain my breath, a doe came out of the opposite woods, crossed the road and headed in my direction. About 100 yards from me, she cut sharply to the right and entered the woods. I thought



**FRED ANDERSON, Kane, used a Remington Model Six 30-06 to drop this whitetail. According to a GAME NEWS survey, a pump action rifle chambered for the 30-06 is the most popular rifle-cartridge combination among the state's deer hunters.**

it was a lost cause until I spotted her sneaking through a heavy stand of brush. When she stopped, I froze the front bead of the Springfield on the shoulder and fired. My hunt was over.

That was the first deer I ever took with the venerable 30-06. I must admit, however, that since that shot in the late 1940s, I have taken a number of deer, but only one more with the famous cartridge. That's by no means a reflection of the '06's potential; it's just that in the gunsmithing and gun writing business, I've had an opportunity to use a wide variety of big game cartridges. While my actual hunting experiences have been somewhat limited with the 30-06, I have shot hundreds of them in accuracy and penetration tests. To some, that might not be as significant as taking a large number of big game animals with a certain cartridge, but any shooter can learn a lot about his cartridge right from the benchrest.

I'm not downgrading the importance of learning about a cartridge's killing potential, but quick kills are not always indicative of a cartridge's overall potential. Other factors are involved. When it comes to making a quick kill, bullet placement and the type of bullet used are really the major factors. Obviously, a heart shot with a 150-grain Remington 7mm-08 bullet will make a quicker kill than a paunch shot with a 165-grain 300 Magnum. The 300 Mag bullet has the edge in weight and velocity, but those advantages mean little if bullet placement is poor.

Let's step back in time, to 80-some



years ago, when the 30-06 made its entrance on the shooting stage. The 30-06 followed the 30-40 Krag as this nation's military cartridge, but I'm ahead of my story. In 1903 a predecessor to the 30-06 was adopted by the military. It was designated the 30-03 and featured a 220-grain round-nose bullet loaded to about 2300 fps. Due to cartridge improvements in Europe, the military decided to shorten the '03 case neck by .07-inch, drop down to a 150-grain bullet, and increase velocity to 2700 fps. The improved round was designated as the "Ball Cartridge, caliber 30, Model of 1906." It wasn't long until that lengthy term was shortened to 30-06. The abbreviated name was derived from the caliber and its year of adoption by the military.

The 30-06 can be fired in the old 1903 chambers, but the reverse isn't always true, due to the difference in neck lengths. In fact, ammunition makers back then produced both cartridges using separate case configurations. It is claimed that shooting the '06 in the '03 chamber gives poor accuracy. As we





AMONG THE many cartridges derived from the 30-06 are, left to right, the 270 Winchester, 25-06 Remington, 228 Ackley Magnum, and 35 Remington Whelen—a 30-06 necked up to 35 caliber.

leave the old 1903, which actually is the forerunner of the 30-06, it's interesting to note some of the few remaining followers of the 1903 cartridge still refer to it as the 30-45, because the original loading used 45 grains of smokeless powder.

The 30-06 began its career as a military loading, and it has gone through a number of bullet changes over the years. It's not my purpose here to discuss the military aspects of the 30-06. The military version of the 30-06 and the 30-06 cartridge found in the Pennsylvania deer woods are not exactly the same. The '06 has an impressive military history, but I view the cartridge from a hunter's viewpoint. In fact, as a hunting load, the 30-06 is one of the most popular and widely used cartridges in the world. For instance, in Europe it is known as the 7.62 x 63mm. It's also true that literally every firearms manufacturer who turns out a standard length bolt action rifle includes the 30-06 as one of the available chamberings.

Why has the 30-06 reigned supreme in the hunting realm for over 80 years? Well, it's a foregone conclusion that it had to offer plenty, ballistically, to stay on the top rung for more than eight decades. It has not lacked competition, either. Fairly early in the 30-06's life, the 270 Winchester came on the scene, with much flag waving and media hoopla. The 270 was a controversial cartridge from the day of its inception. The 30-06 fans pointed out that the 270 was nothing more than a 30-06 necked down to accept a 277-caliber bullet.

There's no denying that statement; however, when the 270 appeared on the market, many of its fans claimed it had better long range hunting potential than the '06. The 130-grain bullet in the 270 can be pushed out of the muzzle at more than 3100 fps. That made it adequate for most North American big game, so it became a formidable opponent for the 30-06. Yet the '06 fans claimed it wasn't as good in an all-around sense.

A big reason for the 30-06's popularity is its versatility. It can be loaded with a wide array of bullets, making it usable for everything from woodchucks to grizzly bears. The secret is selecting the proper bullet for the game being hunted. For instance, using a 110-grain slug for grizzly bear is definitely the wrong choice. The proper bullet weight would be the 180, 200, or the heavy 220-grain slug.

On the other hand, the deer hunter doesn't need that much bullet weight. I've always considered the 150-grain bullet the best choice for Pennsylvania deer hunting, but the open terrain hunter might be better off with a 165-grain boattail bullet. The long range handloading deer hunter should give serious thought to boattail bullets in the 165-grain class. Hornady has a 165-grain boattail spire point that has a high ballistic coefficient of .459, and Sierra's 165-grain hollow point boat tail has an impressive BC of .440. The handloader sticking with a spitzer type bullet in the 30-06 might try Speer's 165-grain, which has a BC of .433.

The 150/165-grain bullets are suited for the skeletal makeup of a white-tailed deer. Both are good long range bullets, but the 165-grain would be my choice if shots stretch beyond 200 yards. The 150-grain slug can be pushed to 2900 fps at the muzzle, and the 165-grain bullet will top the 2800 fps mark with some



loads. I mention these velocities because it takes sufficient speed to keep the bullet's trajectory arc low.

To show what I mean, I ran a computer printout on several weights of 308 bullets. A 165-grain Speer boat tail bullet (.477 BC) leaving the muzzle at 2850 fps is hitting 2657 at 100 yards, 2473 at 200, 2295 at 300, and 2126 at 400. The 220-grain Sierra round nose bullet (.255 BC) with a lower muzzle velocity of 2450—and that's pushing the high side—is hitting 2126 at 100, 1828 at 200, 1562 at 300, and 1334 at 400 yards.

A 150-grain Speer boat tail bullet (.423 BC) with a muzzle velocity of 2900 fps drops to 2681 at 100, 2472 at 200, 2273 at 300 and 2083 at 400. Note that the 150-grain slug has a lower 400-yard range velocity than the 165-grain bullet. I'm not making an issue of this, just pointing out that a heavier bullet with a high BC maintains its velocity better than a lighter bullet with a lower BC, even though the lighter bullet has a higher muzzle velocity. This is of little consequence on normal hunting shots, but quite a few of today's hunters are hunting in open country where 300-yard shots are not uncommon.

While it's of utmost importance to select the proper bullet for the size of the game and the type of terrain being hunted, it's all to no avail if the hunter doesn't learn his bullet's path. This is especially true for long range shooters. Hunters who face shots that stretch from 250 to 400 yards should practice at those ranges.

Using a 165-grain Spear boat tail, a sight setting 3 inches high at 100 yards will put the bullet about 4 inches high at 200, on the money at 275, and approxi-

mately 6 inches low at 325. If my calculations are correct, the total trajectory arc, from high to low, is 10 inches over a 325-yard shot. Over this distance, the bullet is 4 inches above the line of sight at roughly 200 yards, passes through the line of sight at approximately 275 yards, and drops 6 inches below the line of sight at 325 yards. With such an arrangement, a hunter could hold dead center on a whitetail up to 275 yards away, and need to raise the crosswire only a few inches for shots out to 325 yards. By not having to hold above the animal, much of the guesswork involved in such long range shooting is eliminated.

No hunter enjoys shooting a rifle that bruises his shoulder. Heavy recoil is intimidating and keeps many hunters from practicing. Few hunters have the fortitude it takes to learn to shoot a rifle that has a severe backward thrust. The 30-06 falls into what I call the moderate recoil class. Recoil varies according to the weight of the rifle, the bullet, its velocity, and other factors. However, the 30-06 normally generates around 16 to 19 foot pounds of recoil. While this amount of backward thrust is not to be taken lightly, it is manageable for most of us. For comparison, the 30-06 generates only about half the recoil of many magnum rifle cartridges.

The 30-06 is indeed an impressive cartridge. Its case has fostered a horde of wildcat creations and several new factory rounds. New creations are still trying to make inroads on the old military cartridge but, being adequate for all types of North American big game, the popularity of the 30-06 is likely to remain strong for a long time.

## Thoughts While Walking

*Make no mistake; the American Revolution was not fought to obtain freedom, but to preserve the liberties that Americans already had as colonials. Independence was no conscious goal, by bearded conspirators, but a reluctant last resort, to preserve "life, liberty and the pursuit of happiness."*

—Samuel Eliot Morison

# *In the wind*

bob mitchell



Since the Florida Game and Fresh Water Fish Commission instituted their Wildlife Reward Alert Program in 1979, more than \$115,000 in rewards have been paid to nearly 800 people, and only three of every ten people eligible for a reward have actually accepted them. When the program started, sportsmen's clubs and other conservation organizations donated the reward money. But after the program proved so successful, many county and circuit court judges began to order convicted violators to contribute to the reward fund as part of their punishment. That's become the primary means for supporting the reward fund, and in 1987, \$17,000 was so "donated."

**In a fine gesture of cooperation, the Alaska Department of Fish and Game sent \$25,000 of its Ducks Unlimited MARSH money to aid waterfowl in the Central Valley of California. As reported by DU, the money will be used to acquire wintering habitat for many species of waterfowl—including the endangered Aleutian Canada goose—that nest in Alaska.**

By placing tame or flightless trumpeter swans on farm ponds in the Star Valley last summer and fall, the Wyoming Game and Fish Department succeeded in enticing migrating trumpeters to new wintering locations. The attempt was made because 80 percent of all trumpeter swans have been wintering at a small area near Yellowstone National Park, where they have become overcrowded and are most susceptible to food shortages, disease outbreaks and other catastrophes.

For hunting at night, from highways, and without licenses in Wyoming, and for transporting illegally taken wildlife across state borders, four Maryland men were each fined \$3000, received a one-year suspended jail sentence and three years probation, and lost his hunting privileges everywhere in the country for three years. The culprits had planned on taking as much game as they could, by whatever means, but their plans were discovered by a U.S. Fish and Wildlife Service undercover officer.

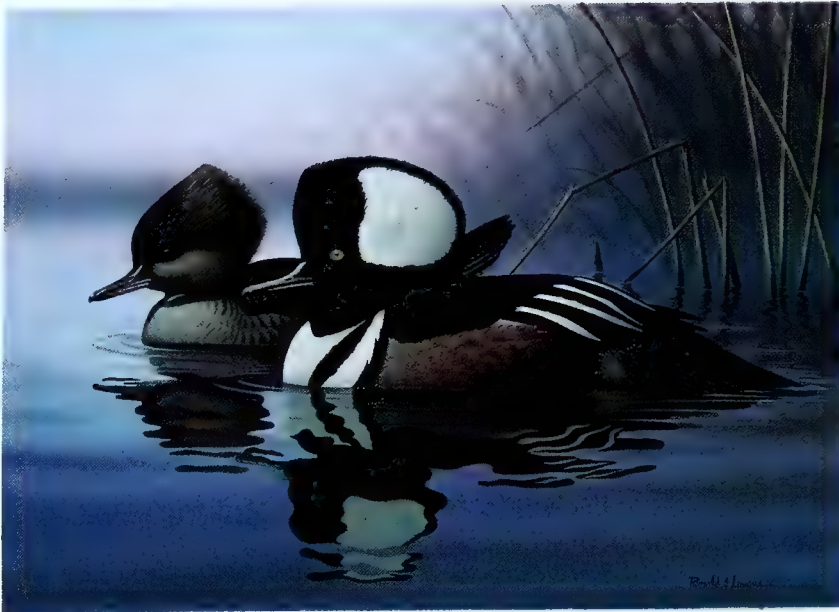
The National Park Service began acquiring land to protect the Appalachian Trail in 1979, and has since purchased 1725 tracts, totalling 78,557 acres, in ten states. More than \$100 million has been spent, and 517 miles of the Trail have been secured. The Service needs to acquire another 12,644 acres (less than 100 miles), but because federal appropriations have remained constant—\$8 or \$9 million a year—while land costs have jumped more than 100 percent since 1984, Congress is being asked to appropriate \$23 million for each of the next two years, to save about \$68 million and four years effort.

Minnesotans voted last November to establish a \$1 billion Environmental and Natural Resources Trust Fund. Interest from the fund will be used, among other things, to provide matching funds to the state's income tax checkoff program. With checkoff donations averaging \$800,000 per year, the matching funds will give the state Department of Natural Resources more than \$1.5 million per year for non-game wildlife research and management.

The Wyoming Game and Fish Department reports that in 1988 deer hunters enjoyed a 73 percent success rate; elk hunters, 35 percent; and antelope hunters, 133 percent (more than one may be taken per hunter). Each success rate is higher than the previous year's, largely because of recent mild winters that have allowed big game populations to increase.

**ANSWERS:** Brood, Litter, Cache, Mast, Diurnal, Nocturnal, Predator, Herbivore, Omnivore, Habitat  
**Final Answer:** Wildlife Management





## **Voluntary Waterfowl Stamp No. 7**

Pennsylvania's 1989 waterfowl management stamp, a pair of hooded mergansers by Orange, Virginia, artist Ronald Louque is the seventh "duck" stamp offered by the Game Commission. Funds derived from stamp and print sales are used for wetland acquisition, habitat development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. For a savings, the cost for five or more ten-stamp sheets, in any combination of years, is \$40 per sheet. The 1987 stamps will be available through December 31, 1989, at which time all remaining supplies will be destroyed.

Stamps are available at the Game Commission Harrisburg headquarters, region offices, Pymatuning and Middle Creek Wildlife Management areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints of this design are available from art dealers and galleries nationwide.



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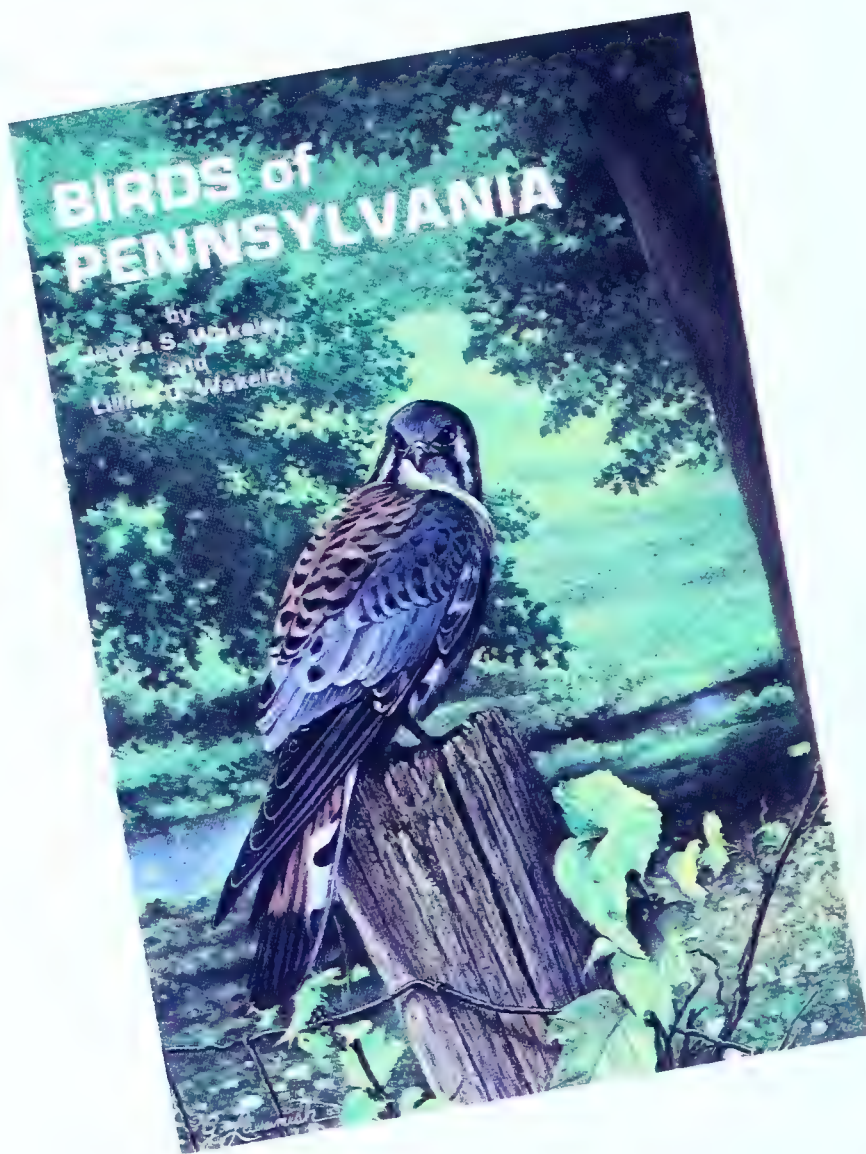
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AUGUST 1989

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*Birds of Pennsylvania: Natural History and Conservation*, a completely new book by Jim and Lillian Wakeley, includes the most up-to-date information on bird biology and behavior, and the kinds of birds commonly found in the state, arranged according to the type of habitat where they are most likely to be seen. This 214-page hardcover book, supplemented with 40 full-color pages featuring the Game Commission's popular bird charts and previous GAME NEWS covers, is being sold for \$10, delivered.



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## Picking Up The Tab

**E**VERY FIVE YEARS the U.S. Fish & Wildlife Service conducts a survey of outdoor recreation in America. In the "1985 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation," the seventh and most recent of the Service's public-use surveys, it's reported that nearly 80 percent of all Americans six years of age and older participated in some form of outdoor recreation that year.

Of the 167.5 million outdoor enthusiasts, 27.4 million were under 16 years of age and, as a group, were not included in most of the statistical information summarized in the report.

The 140 million who were 16 years of age and older included 16.7 million hunters, 46.4 million fishermen, and 134.7 million who participated in "nonconsumptive" forms of outdoor recreation, nature photography, hiking and bird watching, for example.

There was, of course, a great deal of overlap in the three categories. Among hunters and fishermen there were 12.8 million who did both, and 90 percent of the fishermen and 89 percent of the hunters also participated in nonconsumptive activities. Therefore, the 140 million is comprised of 45 million sportsmen and 95 million others who enjoy wildlife in ways other than hunting and fishing.

All this interest generates a great deal of business. Wildlife-related expenditures (by the 140 million over 15 years of age) totaled \$55.7 billion in 1985. Equipment expenditures amounted to \$31 billion, or 56 percent of the total. Trip-related expenditures—food, lodging, transportation and equipment rentals—came to about \$21 billion, 38 percent. Another \$2.5 billion was spent on magazine subscriptions, membership dues and contributions, and on land access. Licenses, along with stamps, tags and permits, amounted to \$820 million, or less than 1.5 percent of the money spent by people enjoying wildlife.

In addition to the national report, a companion report was prepared and published for each state and, according to Pennsylvania's, wildlife-associated recreation is popular and a major economic factor here as well.

In 1985, 7,286,800 state residents 16 years of age and older hunted, fished or otherwise enjoyed our state's wildlife. Of those participants, 1,077,700 hunted, 1,743,800 fished, and 5,811,900 pursued other wildlife-related activities. As for expenditures, Pennsylvanians spent \$714,210,900 on hunting, \$1,032,667,600 on fishing, and \$451,262,600 on other, nonconsumptive wildlife-related activities.

Wildlife is enjoyed by eight out of ten people in this country, and the resource is the foundation for a wide variety of enterprises that pump \$56 billion a year into our national economy. Yet, historically, it was the sportsmen, through their license fees and excise taxes, who financed wildlife restoration efforts, and it's sportsmen, a minority of those who enjoy wildlife today, who are investing in its future.—  
*Bob Mitchell*





**ASIDE FROM** its obvious value as a source of warmth, a fire evokes images of hearth and home, provides a sense of well-being, and stokes the positive spirit.

## Plan and Survive

By J. R. Lindermuth

**Y**OU'VE BEEN wandering in circles for an hour. Time crowds in and everything looks the same. There are no familiar landmarks, nothing to indicate you've been by here before. You look around, confused, and your breath begins to come in quick little grunts; there's an icy band across your chest, and you break out in a cold sweat as anxiety takes its grip. Slumping to the ground with your back against a tree, you stare off across the valley at the mountains, proceeding, one after another, off to the horizon. As the sun sinks, the forest closes in like a living thing and darkness descends around you. Then, the realization sinks in. Lost! I'm lost. Panic takes over.

Lost. There's a terrible finality to the

word. It can overwhelm a person, cause him to panic. And that can be fatal.

No one plans on getting lost, but every outdoorsman should be prepared for it.

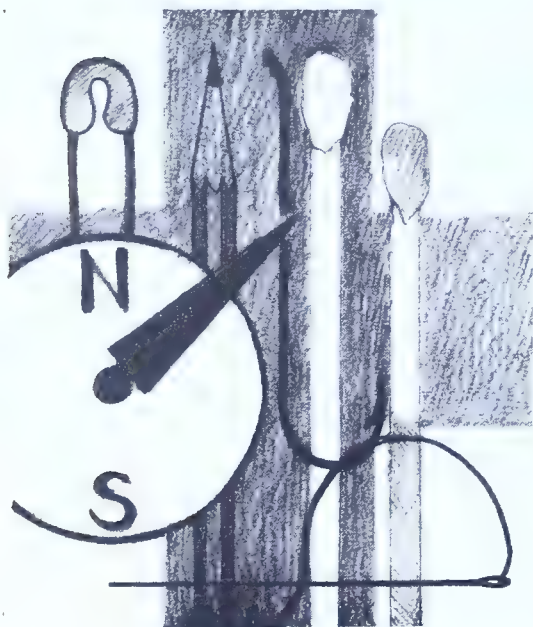
Each year hunters do get lost, and hardly a season passes without someone, somewhere, not surviving and, thus, becoming another grim statistic. There has been more than one case of a person dying of exposure in mid-summer after being lost for only a day or two. With the colder temperatures of hunting season the situation becomes more extreme. But, generally, it is not lack of food or water or frigid temperatures that are to blame in these cases. Most often the culprit is panic.

With common sense, a few memor-



ized rules, and a proper survival kit, such tragedies can be averted.

The first rule is let someone know where you're going and when you expect to return. Second, don't fight Mother Nature if you do get lost; utilize her gifts to help you survive. Third, stay put, unless you're absolutely certain where you're going. And, fourth and most important, stay calm; panic is your worst enemy.



Even if you have told someone your itinerary, it's not a bad idea to leave a note at your jumping off point, giving the time you entered the woods, a compass bearing and estimated time of return. Should you fail to return on time, that information could save your life.

There are many outdoorsmen, myself included, who often go into the woods alone. That can be a dangerous practice.

Some years ago my cousin went out alone in winter. Arden is an expert woodsman. But that didn't help him when he slipped on a patch of ice, plunged over a cliff and suffered serious injuries. Had he not told his parents where he was going that day it might have been too late when the search party found him. His experience taught me the validity of providing someone with my itinerary when I go out alone.

Don't fight Mother Nature. She can be your best friend if you take the time to know her. The more you know about nature and the area where you're going, the better. Study a map to familiarize yourself with where you're going; take it with you and consult it frequently to see that it conforms with the actual territory. Sometimes even the best maps contain errors. Still, having a general idea of where you're going is better than no idea. Carry a compass, and know how to use it. It's amazing how many people buy expensive compasses and never bother learning how to use them.

Even if you know how to use a compass it's better to stay put when you're lost, particularly if you have let people know where you were going. It may be embarrassing to admit you got lost and needed help, but it's better to suffer a little embarrassment when your buddies find you today than to wander around lost for a week.

**SOME PEOPLE** say only sissies carry survival kits. Maybe. But I know of some smart sissies who survived some tough ordeals because they carried one. Just consider it another part of your equipment. It could save your life.

Many people make food and water their primary concerns when lost. Statistics show, however, that most people who wander off are found within 24 hours. You won't starve or die of thirst in that amount of time.

No, your first concern isn't what to put in your belly.

Psychological concerns take precedence over physical needs. The first order of business is to sit yourself down, take a couple of deep breaths, and deal with the fact that you are lost. Facing the enemy head on is the first step in psyching yourself to conquer anxiety. In any battle, whether against man or the elements, you'll see your worst enemy when you look in a mirror. Assess your situation. Don't ignore the downside, but don't underestimate the plusses either. Maintaining a positive outlook will help you survive. Religious people have an edge; they have an immediate



source of hope. If you're not religious, put your faith in your buddies, yourself, a lucky charm — anything that will boost the positive.

I'm not talking about fostering an unrealistic attitude. I realize it would be difficult to be positive if you'd lost your parka, broken your ankle and there was a blizzard coming on. But, in most cases, your situation won't be quite that dire.

Assess your situation. Calm down. Be positive. Then, consider your immediate needs. Keeping busy helps fight panic.

If you've injured yourself, treatment takes priority. Everyone who goes into the bush should carry a first aid kit and know how to use it. Next on the agenda is a fire. Aside from its obvious value as a source of warmth, a fire evokes images of hearth and home, provides a sense of well-being, and stokes the positive spirit. A shelter, even the most rudimentary kind, has a similar psychological value as well as keeping the elements off your head. Now you can consider water and food. In our woods, you're seldom far from water. But, if there's not a stream or brook in the vicinity, rain, melted snow, sopping up dew or chewing twigs and leaves will generally provide enough for your immediate needs. As for food, Penn's Woods are a veritable supermarket, if you know what to look for. I'm not talking filet mignon, but Euell Gibbons lived and did much of his field research in Pennsylvania, and his books are among the best on foraging. You don't have to know everything that's edible, but a little research will give you enough knowledge to find something to eat no matter what the season. At the worst, nibbling bark will ease your hunger pangs and provide more nourishment than an imaginary steak.

Some people say only sissies carry survival kits. Maybe. I know of some smart sissies who survived some tough ordeals because they carried one. Just consider it another part of your equipment. It could save your life.

It doesn't have to be big or contain much. You can use a tobacco can or a



THE WHITE-TAILED DEER is the eighth species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for non-game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patches of the snowy egret, bluebird, bobcat, kestrel and elk are still available: those of the osprey and river otter are sold out. Decals (\$1 each) are available for all but the egret and deer. Order from the Game Commission, Department AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.

plastic bag. Mine fits in one of those plastic cigarette cases. It contains waterproofed matches, a candle stub, pencil and paper, a few safety pins, needle and thread, small magnifying glass, razor blade, a whistle, a couple of Band Aids, some fish hooks and a small coil of thin wire.

There's no set rule on what should go in a survival kit. I've seen some lists that would require a rucksack to carry it all. You can survive without one. It's just another form of insurance. What you choose to put in is what you feel might be useful in an emergency. We're a tool-using society and it's surprising the confidence a few simple items can provide when you have them. There's nothing like having the right tool for the job you're facing.

No one plans on needing insurance, but we all buy it. No one plans on getting lost, but it does happen.

"Be Prepared" is a motto that's valid for all outdoorsmen, not just Boy Scouts.

# Friendships

By Harold B. Birch

**M**Y FRIEND Martin died not long ago. He was 94 years old. I had come to know him as the owner of a farm neighboring my hunting camp property along Tussey Mountain. We shared an access road to a hidden valley occupied mostly by his place and bordered by state forest. No hard-topped road or neighboring farm can be seen from our little valley. We were sheltered from most of the changes that mark even the most rural areas in Pennsylvania.

I first met him 20 years ago, shortly after I bought a 30-acre wooded section of a neighboring farm. He was working furiously with a post hole digger, repairing a line of locust fence posts. He was a trim, white-haired man, many years my senior. Yet, he worked in a manner that belied his age.

## Began Gradually

Our conversation began guardedly. It was a conversation between an outsider and a naturally reticent private man. He seemed concerned that I might question his use of the dirt access road to his farm that lay partly within my boundary. Once I assured him that I had no intention of questioning his long-established right to use the road, the tenor of our conversation changed markedly.

"Have you lived here long?" I asked.

"Nope!" he responded.

Not fully comprehending his mischievous smile, I asked the next logical question, "How long?"

"Fifty years," he said, with only a trace of a smile. He had trapped yet another city slicker in a foolish question.

Warming to the game, I asked, "Are you originally from this area?"

"Nope," he answered puckishly.

I plunged on. "Well, where did you come from?"

"I'm from Clearville," he said quickly. Stranger that I was, I knew Clearville lay 12 miles away, just over the next mountain. Now he smiled openly, at a game he had obviously played before.

I changed the subject. "You ever get lonely here?"

"Nope," he said.

I now understood that we were still playing and I began to enjoy my part as straight man. "How's that?" I responded, hoping I was giving the right cue.

"Oh, when I get lonesome for people," he added, "I just climb up that ridge and look over at the valley road or at the neighboring farm. I can usually spot somebody." That answer confirmed that I had the genuine article here, a smart old farmer with a wry sense of humor.

Thereafter our conversations always took on some of this quality—the wily, old mountain farmer, leading on the big city dude. I loved it, and my fondness for him grew.

In truth, three things we had in common cemented our friendship. He had been an infantry soldier in the AEF (American Expeditionary Forces) in World War I. I had just returned from a tour as an infantryman in Vietnam. He had an abiding farmer's love of the land, and since my days as a forestry student, I had had a love affair with Pennsylvania's mountains. He was still an avid hunter, though his hours in the woods and the range of his hunting were reduced from his earlier years. I had hunted in many parts of the world, but had come home to my favorite pastimes, hunting and hiking in the Keystone State.

Later I met his wife Ada. They had no children. She was a hard working farm-wife whose main pleasures were her summer flower gardening and her winter quilting. Eventually, I learned that the farm had belonged to her grand-





Tom Dwyer



parents who had settled in the area about the time of the Civil War. The farm changed hands in the early 1920s, when Ada and her new husband moved there from temporary housekeeping.

Ada had been a school teacher when she and Martin married after his return from France and his recuperation from a nasty German bullet wound across his back. Because he was a natural woodsman and a hunter of some skill, I always imagined he gave as good as he got in that war. But he was too private a person to ever talk openly of his fighting or the circumstances of his wound.

I spent a number of weeks that first year building a cabin on my property, and I occasionally borrowed tools from Martin or relaxed long enough to scout, with his help, the surrounding forest for the coming hunting season. Over that time I got to know this fine couple better and to recognize the adjustments to aging that they had made.

#### Usual Assortment

Where they had once kept the usual assortment of farm animals, they now kept only a cow and a few chickens. They had a small field of potatoes and a large kitchen garden. Neighbors put in a field or two of corn or hay and shared the harvest with them. The farm house, barn and outbuildings were still carefully tended. They bore evidence of the variety of skills Martin had accumulated in a lifetime of independent living.

Ada was proud of her husband's past farming abilities on land that was not always the most productive. She often referred to him as "my man," and she never said it with more pride than when she declared, "'My man' could get a crop when no one else could."

Their early years had obviously been lean ones. Ada, with the relative advantage of an eighth grade education, had boarded weekdays in the next valley where she taught in a one-room school house. Her favorite story of the era was how on Sunday evenings Martin would lead their plow horse with her perched on top over the narrow dirt trail to the top of the Tussey Mountain ridge over-

looking their farm. At the top she would dismount and Martin would return for another week of farm labor. She would set out on foot down the mountain trail into the adjacent cove to earn a little hard money to keep the farm going. If she was ever frightened on those solitary walks through the forest, she never mentioned it.

Their farm and the adjoining woodlots were havens for game. I often sat on one end of my property, and with the aid of binoculars, watched as deer played in the far fields. Once, while I sat atop the hill above their farm house, I was rewarded by seeing a turkey gobbler walk out of the woodline of a far field, stop, spread himself out in his full majesty, and parade around as if to say, "What a fine fellow I am!"

On another occasion in late spring, enroute to a visit with Martin and Ada, I walked up on three turkey hens and their collective brood of poults. They crouched undetected in the tall clover of one of Martin's fields. As I came close, they took to the air. Later, I listened breathlessly as they signaled one another in the nearby woodlot in order to reassemble the scattered flock of some three dozen or so birds.

The edges of the farm were favorite spots for grouse. I could always walk one up, even though I could never spot the perfectly camouflaged bird before it burst from cover. Ada and Martin loved to watch the game as much as I did, and they never tired of listening to or telling of their own sightings.

In his younger days Martin served as a Forest Fire Warden for the old Department of Forest and Waters. He proudly displayed the Department certificate of service on his sitting room wall. Until the local Forest Foreman retrieved them in the late 1970s, Martin kept the state's backpack water pumps and Pulaski rakes ready for service in his workshop.

Martin loved to tell of the hard work he put into trying to save the forest from the great fire in 1936. He, other local farmers and the "city boys" from the local CCC camp spent several days and





**WE CAME to know by heart Martin's stories of early deer hunting days and to enjoy passing back and forth the several huge sets of antlers that he would eventually produce to back up his tales.**

nights trying to control the fires and then additional days and nights patrolling the fire lines after it had been checked. He returned every day to his valley farm only long enough to grab a quick bite and to feed the livestock.

Martin's farm wasn't posted against hunting, and he readily agreed when I asked if I might hunt there that first year. In those early years he sometimes joined me and showed me the best deer crossings, the tangle of grapevines that was a favorite haunt of the wild turkeys, and the old oaks that harbored dens full of squirrels.

He told me he didn't believe in posting and never turned down those who asked for permission to hunt on his place. But he did keep track of people on his property, and if they were careless or misbehaved, he didn't hesitate to ask them to leave. He once cut down a big oak and used it for firewood because someone had built a tree stand in it without his permission. I continued to ask permission to hunt each season and

dutifully stopped at the farm house to visit and report on my successes and failures after each day's hunt.

Martin once advised me not to post my place. He said locals would only resent it. Also, they would know of my comings and goings and would do as they pleased. I have always been glad I followed his advice. My hospitality has only been abused twice in 20 years, and I take pleasure in the thought that others can share and enjoy the use of my forested land.

### Social Occasions

Through Martin and Ada I came to know others in the valley, meeting them in those early days of our acquaintance at local church suppers. I enjoyed those social occasions and the change they offered from my usual camp fare. I have always been welcomed by local people to hunt on their land, in part I think, because I was willing to take the time to get to know them.

As the years passed Martin and Ada's



kitchen, with its old fashioned, wood-burning iron kitchen stove, became a favorite stopping place on my visits to camp. Out of season, it was a convenient stop on rainy day hikes around the state forest trails. During small game season is was a warming stop enroute to my cabin. That visit would also provide an opportunity for Ada to tell how many deer she had seen crossing the farm. Her eyes were incredibly good, and she invariably saw far more wildlife from her kitchen window than I had seen scouring the woods.

During deer season my hunting partners and I would stop and visit a couple evenings during our week-long stay. My hunting buddies became good friends of the old farm couple and remembered them with small gifts and cards at Christmas. By the time they were well into their 80s and less able to get out to church, the deer season seemed a chance for them to have a few visitors before the ice and snow-enforced solitude of January and February dictated that they rely solely on a few close neighbors.

We came to know by heart Martin's stories of his early deer hunting days and to enjoy passing back and forth the several huge sets of near perfect, thick-beamed antlers that he would eventually produce to back up his stories. Those stories obviously provided a certain vicarious pleasure for Martin. By the time he had reached his 80s, his own hunting was limited to a two-mile round trip trek to the mailbox situated at the end of our common dirt lane. On these trips he was usually accompanied by a faithful old collie that seemed to know

he was expected to stay close and watch out for his master.

At the end of our week of deer hunting we carried our unused camp food to our neighbors and, if we had been successful, also share our venison with them. They lived frugally and were always pleased that we remembered them. After 20 years they seemed a permanent part of my routine. Yet I knew the time must come when they would either pass on or sell the farm.

By the early 1980s, they no longer kept a cow, and their chicken flock was smaller in number. Their vegetable garden was reduced in size and variety. Ada was having health problems and had been hospitalized on several occasions. Her ability to cook, keep house and tend her flower garden were much impaired, and for several years the "Meals on Wheels" folks provided great support and comfort to this aging couple. In fact, their health actually seemed to improve because of those nutritious meals.

Then, in August of 1985, I received a call from their neighbors. Martin and Ada had been moved to a nursing home, and Ada was confined to bed. The callers informed me that the farm, in its entirety, was to go at auction over the coming Labor Day weekend. I rearranged my work schedule to be there, not so much to buy anything, but to provide some measure of support for Martin. I guess I also wanted to be present to mark this major event in my relationship with my old friends.

When I arrived I found that farmers and antique dealers had come from miles around. I doubt our little dirt lane had ever seen so much traffic. The small local church operated a food booth and the weekend's events seemed an exciting and pleasant diversion for most of the crowd. It was, by any standard, a great farm sale and no doubt produced more hard cash than Martin had ever seen before. Yet it was a sad moment for those that knew the family and the farm's history.

As the far recesses of the old barn and outbuildings were emptied for the auction, it was apparent that the tools and



equipment represented a cross section of American family farming equipment for better than 100 years. It was sold and dispersed with little chance that most of its current or future owners would ever know the part it played in the operation of this one farm. This realization contributed to my own feelings of melancholy.

Martin sat by as an observer, trying not to show his own deep feelings. Occasionally, he said jokingly to me or to his other friends that some dang fool was paying far more than he had originally paid for the item. Clearly, he said it not to ridicule the bidder, but to cheer himself and those around him. The finality of that weekend sale became even more apparent a few short weeks later when Ada died at age 87.

Martin lived on in a nursing home or with neighbors. I, my family and my hunting pals drove around the county to see him during our visits to my cabin. Between trips I mailed Martin humorous postcards in hopes of adding a cheerful note to his days. In his 90s now, his memory of long-ago events remained sharp. I recall on one of our last visits that my son asked about his ability to shear sheep. That question evoked a torrent of memories of his early farming experiences raising and marketing sheep.

This year I spent my spring vacation, as I had for a number of years, hunting gobblers in the early mornings and working on various maintenance projects around my camp for the rest of the days. During the visit I was constantly reminded of Ada and Martin by several pieces of their furniture that now grace my cabin. I can, for example, sit in the main room by the fireplace and admire the old "pie-safe" that serves as a cabinet for miscellaneous camp supplies. Ada told me, "Daddy made it when he went to housekeeping." I can also comfort myself because the old farm had since passed into the hands of some good folks who will care for it and love it as its former owners had. Still, I missed my visits with Martin and Ada in their homey kitchen.

Martin was in the regional VA hospital for treatment of a persistent medical problem during my spring visit this year, and I drove up to see him. It was a short visit. He didn't talk much. The other Vets, in their 60s and 70s, called him Pap. The nurses checked on him frequently. We substituted a short walk around the hospital corridors in place of our former walks in the woods. As we walked, he invited me to come see him again. I thought that I might yet arrange my family's vacation plans in order to make another visit soon.

The next day I got a call from good neighbors and old friends of Martin's who live near my camp. Martin had died at age 94. He had lived a long and purposeful life. He was to be buried beside his wife in a small rural churchyard in the Pennsylvania mountain valley where he had farmed and hunted for better than 70 years. He and his wife epitomized that breed of farm couple who contributed so much to our state and country.

### Special Bond

But on a more personal level, Martin and Ada had contributed to the pleasures of those of us who hunted that particular valley. Our acquaintanceship with them had created a special bond with earlier times that had become an important part of our hunting pleasure. It is an aspect of hunting that critics will never understand.

The greatest tribute to those old friends, and others like them who have husbanded Pennsylvania's farm and forest heritage, would be that we continue to have such honest and down-to-earth farm people. You know, the kind of people with just that trace of stubbornness necessary to accomplish difficult tasks in a not always easy world, yet who still find time to befriend others.

Society is changing. But it would be nice to think that new generations who hunt will take the time to really get to know their rural neighbors who allow them to share their land. Friendships, forged under such circumstances, are the major pleasure and reward of the hunting experience.



**PASSIVE traps are often used to capture ducks for banding. Birds enter the central feeding area baited with corn and then move off into arms of the trap from which they cannot escape.**

The Hunter's Role In . . .

## Conserving Waterfowl

By Howard L. McKean

Photos by the Author

**I**N A SERIES of articles about waterfowl in North America, the *St. Paul Pioneer Press Dispatch* reports: "Many waterfowl experts believe North America's ducks are at their most critical juncture in history." A *Philadelphia Inquirer* article on the same subject had this to say: "The decline has been so relentless and the causes so varied that many wildlife experts are concerned that the trend cannot be stemmed—that ultimately some 29 species of ducks could disappear." In the preface to the North American Waterfowl Management Plan<sup>1</sup>, preparers state: ". . . losses of breeding,

migration and wintering habitat have resulted in alarming declines in some waterfowl species."

Chief goal of the 15-year plan is to restore duck breeding populations to 62 million (up from current estimates of 35 million) by the year 2000. Other measures include protection of wetland breeding grounds and wintering areas and restrictions on hunting.

In newspaper and magazine articles, in wildlife studies and government reports, conservation problems confronting ducks today are well documented. By all accounts, the future isn't bright for many species of these birds. And, as ducks are seen as a bellwether for all types of waterbirds, including shorebirds and waders, the news becomes even grimmer.

<sup>1</sup>The North American Waterfowl Management Plan is an action paper formulated in 1986 by the United States and Canada to improve the situation of all waterfowl by the 21st century.

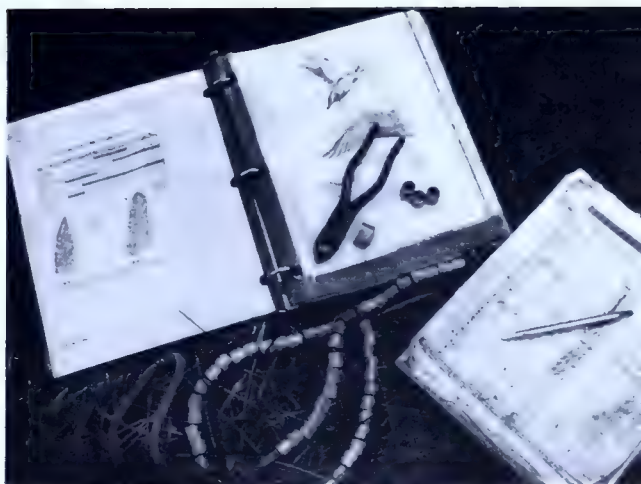




Many factors have led to the decline in duck populations. In addition, last year's drought caused extensive loss of breeding habitat. Across the Midwest and into Canada, marshy potholes where ducks have bred for centuries went dry. Increased production of farm goods have caused many more nesting areas to be plowed under. Competition for remaining potholes have stressed ducks to the point where it is affecting their ability to reproduce. This concentration of birds in surviving nesting areas has also made them easier prey for foxes, raccoons and other predators.

Though serious in itself, loss of breeding grounds are only a part of the problem. Development of coastal winter havens into resort and vacation communities, increased hunting pressures and other factors have all taken their toll. By some estimates, duck populations in North America have declined 25 percent or more in the past 30 years.

To properly deal with these problems, it is important that wildlife specialists have the clearest picture possible of how ducks are faring. As a waterfowl hunter, your help is needed to



**AFTER** each captured bird is identified and examined, left, a small metal band is placed around its leg. Detailed records are then kept, from which the habits and welfare of each species can then be determined.

return duck populations to safe levels. Probably the easiest way to participate concerns the leg bands found on many waterfowl.

If you have ever had much experience at all as a waterfowl hunter, chances are that you have encountered a tiny metal band surrounding the leg of a harvested bird. Closer study of the band would reveal a number, along with the legend, "AVISE BIRD BAND/WRITE WASH DC." "Avisé" is not a misspelling. Rather, it means "to report or tell" in many different languages. Don't dismiss the band as a leftover from some past wildlife study—the study is ongoing and can only be effective when you take the time to return the band.

### Act of Congress

Modern banding of waterfowl can be traced directly to the Migratory Waterfowl Act of 1918. This Act of Congress, which established federal responsibility for all migratory birds, was the direct result of the Convention for the Protection of Migratory Birds, a treaty signed by the United States and Great Britain in 1916. The Convention recognized that, because of the intercontinental ranging of many ducks and geese, there was a need for a comprehensive, coordinated management scheme beyond the scope of individual nations.

It was also obvious that if the Fish and Wildlife Service, the federal agency given the responsibility of protecting waterfowl (and other migratory birds), was to properly undertake its task, much needed to be learned about the health and life habits of waterfowl.

### Several Sources

Over the years, several sources of information have been utilized for this purpose. Mid-winter waterfowl surveys, spring breeding pair counts, collection of duck wings and goose tails from hunters—along with waterfowl harvest surveys sent to the Branch of Surveys for analysis—and, of course, banding have all been done.

While each of these sources is important, information from recovered bands is the key data for the Office of Migratory Bird Management (OMBM). Information received from recovered bands is used to establish migration times, routes and destinations, lifespans, population changes and many other details. It was banding information, for instance, that has shown a precarious

decline in black duck populations, attributed mostly to loss of habitat and inbreeding with other species of ducks—which results in hybrids unable to reproduce.

Most waterfowl banding is conducted in the mid to late summer, before the start of the fall hunting seasons. At that time, teams of banders from the OMBM fan out to duck breeding grounds in the Midwest and Canada. They are often assisted by personnel from state game agencies, universities, and nearby Fish and Wildlife refuges. Follow-up banding of certain species is conducted in wintering areas. Passive bait traps, set on both land and in the water, is the primary method used to capture birds.

Once waterfowl have been trapped, banders first check for previously banded birds, noting the band number in a log book. Unbanded birds are then examined to determine age. The presence or absence of chest feather markings, along with the configuration of certain wing feathers, are reliable means to establish the age of the bird. In species where males and females are

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**WITH continued dedication of resource specialists and full cooperation of sportsmen, waterfowl can rebound from the many pressures facing them today.**

identical, the birds are also examined to determine their sex. All of this data is also entered into the log, as well as the number of the leg band. Finally, using special banding pliers, the band is carefully attached to one leg of the bird, after which it is released.

During the summer banding season, log information is forwarded on a daily basis to the Bird Banding Institute (BBI), the branch of OMBM responsible for banding. Whereas in the past, much of the information was manually collated, today computers are utilized to speed processing. From all of the data collected, a picture emerges of the habits and welfare of each species of waterfowl. It is this information OMBM uses to establish a framework of hunting seasons and bag limits, which it forwards to state game agencies, generally in late July or early August. State game agencies may impose stricter limits or shorter seasons, but may never exceed those set by OMBM.

It is for this reason that is important for you to return every band you recover. BBI needs a constant flow of bands in order for its studies and, consequently, its recommendations on seasons and limits, to be accurate. Returning only the next band you recover and never following up with further returns won't do. The return rate has to be predictable in order for their conclusions to be meaningful.

In addition to returning the band, you



should also include your name and address, the date and detailed information on the location the band was found and under what circumstances you recovered the band (shot, found dead, captured, etc.). Note that the bird does not have to be dead for the information to be useful (nor for that matter, does the bird in question need to be a duck or goose. BBL is interested in receiving information on all recovered bird bands). Should you come into possession of a live, banded bird which you intend to release, first note all the numbers and letters on the band. Send this information to:

U.S. Fish and Wildlife Service  
Bird Banding Laboratory  
Laurel, MD 20708

For your efforts, you will receive a certificate from the Bird Banding Institute, as well as a report containing information on the bird, including when it was first banded. You will also get the satisfaction of knowing that you have contributed in no small way to the proper conservation and continuation of waterfowl hunting.

## **Game Commission Firearms Auction**

The Game Commission's annual public auction of confiscated firearms will be held on Saturday, September 16, at the Lebanon County Fairgrounds along Rocherty Road, east of Route 72 and south of Lebanon. Buyers must be Pennsylvania residents at least 18 years old and able to produce positive identification. Personal checks and cash will be accepted. Firearms may be inspected from 8 a.m. until 10 a.m., when the auction will begin. For further information write to the Game Commission, Bureau of Law Enforcement, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.



**THERE HE WAS**, in an old walnut tree. Singer was leaping onto the trunk as we charged out of the fencerow brush, and looking our way as if asking what had been keeping us.

## Singer

By Joe White

**A**LUMINESCENT sliver of December moon hung low over the spruce trees at the head of the lane above the barn. Each of the old trees glistened in the soft light, from peak to low hanging boughs, still weighted with snow and standing amid drifts that made them look like candles on a cake. From the barn door I could look down the valley to the clusters of farms where yellow lights of windows in the dark shadows of the farm houses spilled out into the night. Smoke rose straight upward from a dozen chimneys.

I pulled armloads of hay from the stack next to the barn, using a hand-made hayhook that was smooth and shiny from long use. I gathered the hay and carried generous portions to the

two big black Percheron mares and each of the milk cows. The early snow had drifted deep against the barn and stood eight inches deep on the roof as well. The old barn was insulated and amazingly quiet. I could hear the streams of milk hit the pail as my father milked the last of the cows.

"Virgil Ludwig is going hunting tonight, Dad. May I go with him? Old Singer ought to tree a bunch." There was no pause in the milking sounds although I could tell the pail was almost full.

"I sure could use a couple more skins before Christmas. That'd be money I wouldn't have to ask you for."

"You'd better get up to the house and do your homework, boy. I know you're



close to failing algebra again!" he said with a strong warning tone that came from 30 years as a school teacher. Then he added, "Virgil's a good hard-working farmer but that's about all, and you'll be nothing more if you keep chasing through the woods all night."

"Dad, I promise I'll get right on that algebra as soon as we get back. The horses are bedded down and all the stock has hay for the night."

Such was my ploy. Dad loved those mares and was a stickler for having their stalls clean and fresh.

"Well, all right. But see to it you get to those books." The barn door had closed behind "all right," but I knew what followed; I'd heard it over and over as my grades sank to monotonous collections of Cs and Ds—hardly the best record for a teacher's son.

I ran to the house, rang up Virgil on the party line and breathlessly told him that I would be at his place in half an hour.

What a night. The wind was still. In the moonlight the farm fields stretched to the surrounding hills. Fence rows, black and ragged against the snow, dark patches of woods and thickets that were as familiar to me as a city kid's front yard. I opened up the algebra book, propped it against the base of the oil lamp on the living room table and began an exercise while the heat from the Franklin stove pulsed across the room.

"Moooother, make Joe get out of here with his barn boots. He smells like cowmanure!" moaned my sister while holding her nose.

"OK, I'll leave," I said, heading for the back porch where I had all my hunting gear. I pulled a ragged pair of bib overalls over my wool pants and added a torn blanket-lined denim farm coat, a pair of mittens and a wool cap. Clothes don't last long when you are coon hunting; half of what you wear gets caught on barbed wire fences and briar canes.

I could hear Dad coming up from the milk house. There was just enough time to duck into the porch pantry and stuff my jacket pockets with four chunks of corn bread left from supper. Might need

a snack. Then, all I had to do was fill the lantern and grab the flashlight. Ready.

Despite Virgil's lack of formal education, he was a careful, thrifty farmer and a genius with engines. He also loved to hunt and welcomed my company, letting me fill in until his son Robert was old enough to come along. Virgil was a short man, but with amazing strength and a placid personality.

His dog Singer was a big black and tan, rangy and raw looking, but bright eyed and eager. He had no ancestral papers, but Virgil was sure that Singer had some mighty high class coon dog blood in his veins and I believed it as gospel.

### Old Nash Coupe

We took Virgil's old Nash coupe up the valley to a big cornfield surrounded by woodlots and thickets. Singer was ready and eager when we stopped at the end of a farm lane. It was all I could do to hold on until Virgil slipped his leash.

At first Singer trotted around us like a canine Dan Patch, lifting those long legs up out of the snow with the daintiness of a dancer. Then he started sniffing the brush piles, corn shocks and tree stumps at the edge of the field, then he wandered off into the darkness, following a silent trail. Sometimes Virgil would build a little fire and we'd hunker down close to the flames and wait for Singer to hit his first track. Usually, however, Singer started his trail song before we had the kindling gathered.

Tonight we stood by the car in the moonlight and waited, ears straining for the first sounds of the hunt. But only ordinary sounds came—the bawl of cattle from the barns down the valley, the whicker of a horse, and the barking of a farm dog. We sat in the stillness of the coming night, watching long shadows leaning from trees, haystacks and fence-rows. Waiting, waiting, waiting for Singer's first yelp. These are the moments I love, times full of expectation of the action to come, yet wonderfully peaceful.

The moon climbed higher, spreading its light through the forest and across



### Question

Is it legal to carry a firearm while training dogs for hunting purposes?

### Answer

Any firearm fired from the shoulder, or bow and arrow, may not be carried while training dogs for hunting purposes. Sidearms, however, are permissible.

the fields. In the glow of the light Virgil's face was silhouetted such that I could see his beard stubble. Even though I could not see his eyes I could tell that he was as eager as I for the chase to begin. He loved the hunt—the night pursuit, the reckless headlong run we were about to make across the darkened world before us.

### Singer's Big Voice

Suddenly the yelp came, the one we were waiting for. Singer's big voice came tonguing through the night. A tangle of grape vine, a thicket of locust, a bramble of blackberry canes, or a grove of oaks up on the ridge, we weren't sure from where. Off we ran, leaping brush piles, sliding under fences, scrambling over others, arms up to protect our faces as we crashed onward. On to the sound in the night, the sound of Singer on track.

We were never sure what Singer might be tracking. He would run raccoon, opossum, bobcat and fox. Once he cornered a mink. Because bobcats were scarce in our country we could generally count on a raccoon if Singer trailed more than a few minutes. Opossums usually treed fairly quickly.

"Coon might run for a mile in the right cover," Virgil said as we slowed to a trot. "Sounds like this one might be

headed for the river; Singer will let us know. Might be a fox," sputtered Virgil as we jogged along.

Singer's voice was big and strong now, clear in the cold night, his full cry of pursuit ringing over the hills just as his forerunners had. What a sound! Sweet music to the hunter's ear. His voice was clearer now and just beyond us in the near cornfield. We stopped to make sure then ran harder toward the sound. Singer normally kept up his resonant baying as long as he was in pursuit. When his quarry went to ground or treed, Singer would begin a series of short yelps that must have struck all kinds of fear in the hearts of the creatures he hunted. On we ran, through the boot-grabbing dewberry vines, the blue stalks of raspberry, thickets of sassafras and black locust.

There he was. Singer was leaping onto the trunk of an old walnut tree as we charged out of the fencerow brush. He looked at us between yelps as if to ask what had been keeping us.

Virgil went straight to Singer. He hooked the leash to his collar then stroked the big dog's head, telling him that this was the granddaddy of all raccoons and how proud he was to have such a great dog.

Virgil knew the first rule of good management: always show appreciation for your workers. I envied that dog.

In a matter of minutes the raccoon was dispatched from a top fork of the old tree. Singer was given a whiff as we stuffed it into the game bag. Virgil slipped the leash and Singer resumed the hunt.

"I have heard coonhunters brag that their dogs never chased skunks, opossums, squirrels or even fox, but I think such claims are exaggerated," said Virgil as he swung the game bag over his shoulder. "Coonhunters don't lie outright, but some of them do toy with the truth now and then." He grinned, dusted the snow off a fence rail and sat down for the wait. "Even the best dog will go off the trail when he gets excited."

We huddled around the lantern then



**EACH OF the old trees glistened in the soft light, from peak to low hanging boughs, still weighted with snow and standing amid drifts that made them look like candles on a cake.**

started a little twig fire to warm our hands. I pulled the chunks of cornbread from my pocket and we ate them noisily, our steaming bodies still heaving from the run. As the flames licked higher we crouched close, choking in the smoke, but welcoming the warmth that came through our soaked gloves and torn trousers. Virgil took advantage of the quiet moment to ask me how school was going and urged me to work harder at my studies. He told me of his own struggle to support his family and the problems his lack of education had presented. Then the conversation drifted to stories of his own boyhood back in the hill country, hitchhiking adventures and tales of coon dogs and tales of hard times. It added a lot of color to the life of a farm boy. After 30 minutes old Singer yelped again. We tramped snow into the fire and trotted down a row of corn shocks, our long shadows dancing on the snow-covered field.

So the night continued. A couple of opossums and two more raccoons were added to our burlap game bags. Then Virgil called a halt, whistled Singer to his side and snapped on the leash. The night's hunt was over.

We began the uphill climb to where we had left the Nash. Our pace was slowed by fatigue and the load we carried. Singer seemed pleased with himself and pulled steadily toward the car. The moon was high now, probably close to midnight. There was work to be done and I had a schoolteacher father to face come morning. Virgil said he'd skin the catch and that I could come over and flesh the pelts after school.

Back home I hung up hunting clothes on the back porch and slipped in the back door, wearing only boot socks and long underwear. I was sneaking up the back stairway to the bedroom I shared



with three brothers when mother met me at the top of the stair.

"My heavens, Joseph, I could smell you as soon as you came in. You get down to the basement and take a bath before you even think of going to bed. There's hot water in the tub."

In minutes I was soaking off eau d'racoon in the big galvanized tub; clean towel and fresh long johns waited on the basement steps. Now reeking of soap I crept back up the stairs and into the big brass bed. Soft flannel sheets and heavy quilts welcomed my tired bones and the multitude of scratches that were souvenirs of the night. Mother came to the door and said softly, "I'll get you up early and we'll go over that algebra before school. It's not so hard. Good night."

I looked out the frost-rimmed window to see the hillside we had raced over just hours before. In those delicious moments when sleep was about to take me away I was sure I could hear Singer's voice. Or was I dreaming already?

# Focusing On Fox

By Joe Kosack

**F**OX TRAPPING is probably the most difficult type of trapping a sportsman can pursue. To be successful, a trapper needs to have a thorough understanding of the quarry, the intuition of a successful Wall Street businessman, and the patience of Job.

Understanding foxes is never complete. Each year you head afield, more of the animal's ways of life and numerous personalities become clearer. But just when you think you're starting to get a handle on reds or grays collectively, a troublesome fox will come along and rain on your parade. Then confusion sets in and direction is often lost.

Over the years, foxes have been dubbed mysterious, intelligent and cautious. Here is an animal, so past accounts claim, that can jump on a deer's back to elude pursuing hounds; that is more intelligent than the hunter or trapper pursuing it; that can literally smell danger. Wow! After reading such stuff you'd think this furbearer would be uncatchable.

Contrary to popular belief, red and gray foxes are merely animals. They are not smarter than humans, nor can they smell trouble. However, some foxes can outmaneuver dogs and, because of their nervous nature, they do steer clear of unnatural odors, especially when the odors are reminders of an unpleasant experience. For instance, when humans smell smoke they know enough to look for trouble. Foxes are basically the same: when they smell human odor, or any odor that has accompanied past troubles, they step lightly or alter their direction of travel.

Knowing that the fox can be difficult is winning half the battle because overconfidence in fox trapping will lead to a humbling encounter eventually. However, pessimism is also bad for a fox trapper. It affects his frame of mind

by decreasing the aggressive tenacity needed to uncover information about the individual quarry and the sport as a whole. So, leave yourself wide open to the experience and wonder of "foxology," and store for later use all that you learn and see in your days afield.

Learning the different quirks of reds and grays is one of the primary objectives of a budding trapper. Although the species are similar in many respects—both like to dine on rodents and birds, breed in January, follow the path of least resistance—many unusual behaviors and tastes separate the two species. Let's take a look at each individually to distinguish black from white, or more appropriately, red from gray.

If only one word could be used to describe the red fox, "nervous" would qualify best. Not that the animal is a basket-case or cowardly, but rather because this fox utilizes caution in almost every facet of its lifestyle. Gifted with exceptional senses of smelling, hearing and eyesight, the red fox is quick to detect a potential meal and trouble; that is, if the animal has lived long enough to master its superior system of detection. For instance, I have vied with many mature reds that could uncover a trap or steal bait at my sets. However, I've also caught young reds in seven-hour-old sets made with my bare hands. They must have screamed with my odor.

Time and experience educate the red fox. When one's nipped by the closing jaws of a trap, it remembers all the details: the smells, the appearance, and the general location of danger. So avoid repetition when pursuing a specific fox. Mix up the selection of attractors, sets, and trapping locations and you'll be on your way to ambushing reds successfully.

Because of its nervous nature, the





*Dave Kintzel*



red fox likes to travel open areas. This isn't to say a red won't crawl through briars in a weedy field to pursue a rat, or into the close quarters of a culvert to avoid crossing a highway where it was narrowly missed by a car in the past. It will. Instead, it means the red will maneuver in the open where it can use its special senses best until opportunity or necessity compels it to change.



Red foxes are accustomed to following fringes of habitat because here is where prey population densities are thickest. However, the opportunistic red is quick to cash in on animals displaced by weather conditions or killed on the highway. For example, muskrats left high and dry by drought may be preyed upon heavily, and a roadkilled cottontail will be dragged to a safer place for consumption. Overall, this canine will work no harder than needed to obtain its daily bread.

Although found almost everywhere,

red foxes are most common in farmlands. Here in the open these foxes prefer, trappers do best by making sets along tractor roads, crop changes, woodlot edges, and deer trails. Sometimes it will take a week for a red to visit a particular set as feeding whims, weather conditions and human pressures often alter their movements. Still, as each unsuccessful day passes the trap set becomes more deadly by shedding its human odor and becoming more natural in appearance. In short, farmland fox trapping requires patience and confidence in your ability.

**THE KEY** to proficiency in fox trapping is learning all you can about them. Whether red or gray, a fox is no easy quarry unless you've paid your dues in reading, field observation and trapping experience. Even then, there will be sour days.

Reds are extremely sensitive to changes in weather. Their movement is reduced or shifted by rain, snow, wind and unseasonably warm weather. For instance, rain and wind diminish the fox's senses of awareness, often forcing this nervous fellow to lie low until conditions stabilize. Squaw summers and reds' winter coats don't mix well either, because the combination creates overheating in travel and unnecessary burning of fatty supplies needed for winter. Substantial snowfalls, on the other hand, funnel foxes into wind-blown areas and ice-covered swamps where travel is easiest.

In all, the red fox is a reasoning critter. Its opportunistic manner is shadowed by its ability to remember and respect. So to trap it successfully you should avoid repetitious methods and develop a knack for determining where and when the furbearer will travel. The rest of the process evolves around patience—plenty of it!

Unlike the red, the gray fox prefers the thickets and hills of Penn's Woods because it doesn't have the slender build and long legs of the red. Still, the gray is no pansy. As a matter of fact, the stockier grays will usually push the



thin-skinned reds from an area when the two species vie for territory.

The chunky gray fox hides at the outset of a disturbance or trouble instead of dashing off like the red; that's why it prefers the cover of swamps, briar patches and chop-offs for its home. The gray when roused from its hiding place may dive into an old groundhog hole or scamper up a tree, rather than run off like a flushed red. Each of these species tends to instinctively occupy habitat best suited to its physical limitations.

As winter approaches, the gray takes off on a feeding binge to build its fatty tissue supplies. Reds, however, can't indulge in such feasting because of their need to remain slim and trim for their rambling lifestyle. Still, the reds do put some lard on.

The gray seems happy with a smaller home territory than the red, learning to exploit every type of food available there. The gray will spot a disturbance—such as a trap set—in its area far quicker than a red. As a matter of fact, if you don't catch a gray fox within four days you can surmise that it isn't interested in your offering. You should then try another type of bait and set (remember, avoid repetition).

Unlike the red fox, which chases off the year's young at the outset of cold weather, the gray many times maintains its family unit until mating season arrives in January. Because of this, gray fox trappers can enhance their productivity and reduce their effort by making more sets in a smaller area. If you opt to set sparingly in gray fox territory, be sure to remake sets that take grays because chances are one of its family will investigate the set. If the set doesn't score again in about four days, and you're sure there are more grays in the area, move it a few yards and try again. Usually, it's best to use a urine post set in this situation.

Because the gray is determined to build its fat supply in late fall and early

winter, it moves in weather conditions that stall the red fox. It's not uncommon to catch grays in wind-whipping thunderstorms or unseasonably warm weather. Maybe this is due to the stocky fox's aggressive nature or its intimate familiarity with home territory. But one thing's for sure: the gray moves in miserable weather and trappers who keep their sets active are bound to be productive.

Grays lay out to sleep most of the year, but when snow arrives they seek dens. Reds, on the other hand, bed on the ground the entire winter, except in a few instances where certain reds express their individuality and seek the comforts of a den.

### Choice Locations

Gray foxes like to travel edges just like reds. Their tracks can often be found canvassing the edge of a stream or swamp, weedfields bordered by forest, garbage dumps, deer trails, fire lanes and mining roads. Choice trap locations are where travelways meet or where a food source—grapes, acorns, rodents or game birds—is plentiful.

It's beneficial to the trapper if he can determine whether he's trapping reds or grays, or both. Primarily, the information will assist him in the patience department, but it will also give him guidance in what type of urine and gland lure to use at sets. For instance, red fox gland lure or urine will usually attract both species, but gray fox by-products often spook reds.

When tracks are found, study them carefully to determine the maker. Reds have smaller pads than grays. However, the overall paw size of a red is larger than that of a gray.

The key to proficiency in fox trapping is learning all you can about them. Whether red or gray, a fox is no easy quarry unless you've paid your dues in reading, field observation and trapping experience. Even then, there will be sour days.



Hunter-Trapper Education From An . . .

## **“Experienced” Hunter’s View**

By George E. Dvorchak, Jr.

**“THIS TRAINING GUIDE** is dedicated to those people who have given so much in order that new hunters and trappers will be able to go afield safer, more responsible and more knowledgeable in the ways of true sportsmen and women.” This is a quote from the Pennsylvania Game Commission’s training guide given to each student enrolled in a hunter-trapper education course.\* The word new in the above quote may be a turnoff to many of you seasoned hunters. Although largely designed for first time hunters and trappers, these courses are open to anybody interested in learning more about the two sports.

After hunting for 28 years, last sum-

mer I enrolled in a course offered by the White Oak Rod and Gun Club, Inc. My main reason for enrolling was because many agencies now require all prospective hunters complete this type of course before applying for a license in their states. Just presenting an old license from another state is often no longer considered valid proof that a person is a sufficiently responsible sportsman. It seems that many policy makers are now finding that just because someone has hunted in the past, he or she is not necessarily a safe hunter. Many of these people might be successful hunters, but do they constantly think about safety when they are afield? Unfortunately, some do not. Although hunting is a safe activity when compared with many others, every accident is one too many, especially because

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\*A new Pennsylvania hunter-trapper education guide has since been published.



**TODAY'S** hunter-trapper education courses are so comprehensive that every sportsman, no matter how experienced, can gain valuable information that will make him better, safer and more responsible.

nearly all could have been avoided. The purpose of a hunter-trapper education course is to give sportsmen information which will be automatically recalled before attempting to cross a fence with a loaded firearm, for example, or look through a scoped firearm at an unidentified moving object.

In general, the 10-hour course is presented by volunteer instructors who themselves completed hours of instruction in preparation for teaching safety and other aspects of hunting and trapping to others.

On the first day of the course—of which I was the only student over age 13—one of the instructors took all students to the rifle range for a demonstration and hands-on training of what a proper sight picture should be.

Afterwards, we returned to the classroom for a slide presentation on the nomenclature of various firearms. This included photos of shooting, safety, cleaning, firearm parts, etc. Also covered were the various ways to safely carry a firearm, and the several types of safeties and sights.

Laws concerning hunting and trapping regulations, such as the 150-yard Safety Zone, 250 square inches of fluorescent orange, etc., were discussed.

A "color blind" indicator test was given to demonstrate how one's eyes, even if there are no vision problems, can play tricks on the mind.

A slide presentation gave a good explanation of Pennsylvania's SPORT—Sportsmen Policing Our Ranks Together—program. Ammo types and shot sizes were also discussed.

Next, Jim Corey talked about trapping. Various traps and related gear were shown and the following topics were emphasized: when traps should be legally and morally checked; why trapping is necessary today; the animals that can be legally trapped, along with nat-



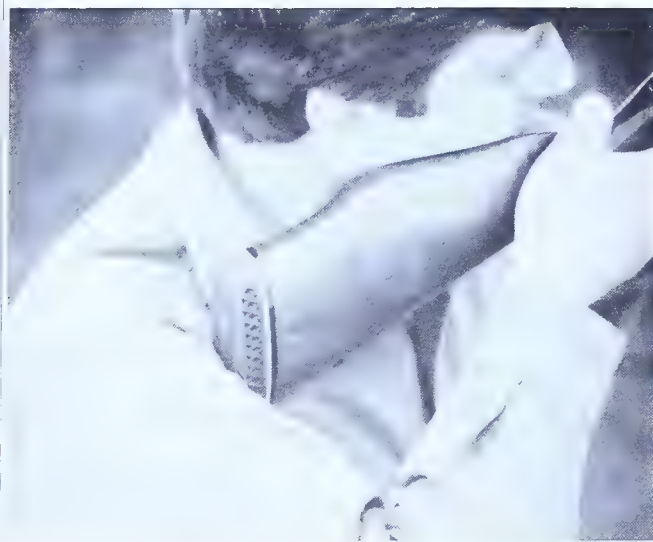
ural history information about them; where to set traps and what type of traps are legal; and the importance of marking traps.

Instructor Bill Beresenko spoke about the NRA's junior shooting programs offered at the club.

### **"Shoot, Don't Shoot"**

To end the day, the popular film, "Shoot, Don't Shoot" was shown. This excellent film depicted a situation, and then the question, shoot or don't shoot, was asked. The audience then called out what they felt would be proper and safe. The movie got the viewers to look beyond just shooting at a target; each had to decide if it was safe to shoot or not. Every seasoned hunter can benefit from such a film. It makes the viewer react to particular situations.

The second day of the class began with a session on the club range, where we fired centerfire rifles at 50-yard targets. Next, the class was split into two groups. One group went with Paul Becker to shoot trap, and the other with Ed Soyke to shoot skeet. After a half



**THE AUTHOR** noticed a few new shooters held the gun butt too high when shooting, above. The proper way, below, is to hold the butt squarely against the shoulder. This reduces felt recoil, which translates into less flinching and better gun control.



hour the groups changed fields. Later the entire class then went indoors to shoot 22 rifles from the prone position at 50 feet.

After the practical part of the course was over, another film was shown. This one stressed such topics as the zone of fire, and how your mind can make you think you saw something that in reality was something else—how a man's red handkerchief could be mistaken for a turkey's head, for example.

Guest speaker Rick Moroney from the Pennsylvania Chapter of the Na-

tional Wild Turkey Federation, gave an interesting presentation on turkey hunting and how to avoid accidents. He stated that most accidents, and mistaken identifications, are not caused by 12-year-olds, but by so called experienced hunters—more proof that a voluntary refresher course could benefit even the most experienced hunters.

Another guest speaker, Leonard Honick, a Deputy Wildlife Conservation Officer, went over with the class what constitutes a game law violation, such as at what age a hunter must be accompanied by an adult, Safety Zones, and fluorescent orange requirements, and that it's unlawful to hunt in an unharvested corn field without permission. A good point stressed was that even if someone has a personal protection permit, he is not permitted to spot game with a firearm in his vehicle.

On the third day, Dave Winwood gave an archery presentation. Basic topics covered included the history of archery, types of bows and arrows, vital areas on game, bow safety and accessories, anchor points, follow up on shots and field dressing.

Ray Beech began the next section with a demonstration and discussion of black powder firearms. Some of the topics demonstrated and discussed included how to use them properly, and the importance of marking the ram rod with a line to indicate empty and another line to show a properly loaded level with a seated ball. Ray stressed that with black powder, a person should never put steel to steel because a spark could result in an explosion. Anything you would want to know about muzzle-loading, accessories and powders was presented.

The second to last part of this course was a talk on first aid by Ed and Dave. It included information on hypothermia, how to stop bleeding, broken bones, shock, etc. Then Ed continued with a discussion on using maps and a compass, and how to keep from getting lost in the outdoors.

Then, what everyone was preparing for had finally arrived—the final exam.



AN OPPORTUNITY to do some actual live firing in a controlled environment with proper instruction is, perhaps, one of the biggest benefits of today's longer, more comprehensive hunter-trapper education program.

It consisted of 35 multiple choice, 15 true or false, and the correct answer from diagram type questions. A more than fair exam, it was easily passed if the participant had paid attention to what the instructors covered, and if he had read the entire training guide. While waiting for the exam to be corrected, club officials invited everyone to return to the club to shoot in the junior rifle program. The dollar fee covered all ammo, use of rifle, targets and, best of all, an instructor to help the new shooters get started the correct way.

I wish I had had this opportunity to participate in such a manner when I was 12. Yet, I was fortunate to have a father who took me out to my grandmother's farm every Thursday and Sunday, to burn up at least 500 22-caliber rounds a week. We did that even if he was tired or



busy. It is such parent dedication that will make a good shooter and takes up where an excellent introductory course lets off. A young shooter needs to be both a successful and a safe hunter for his or her future years in the outdoors to be fruitful. Also the future of hunting depends on it.

### *In Memoriam*

**Egbert G. Musser**

1906-1988

Game Land Manager 2

Harrisburg

Retired 1970; 25 years

**Harold L. Plasterer**

1897-1988

Bounty Claim Agent

Harrisburg

Retired 1957; 34 years

**Samuel C. Schaffer, Jr.**

1920-1988

Communications Assistant

Harrisburg

Retired 1977; 27 years

**Stephen Kish**

1916-1988

Conservation Inform. Assistant

Northeast Region

Retired 1979; 33 years

**David H. Franklin**

1888-1989

Wildlife Conservation Officer

Fulton County

Retired 1953; 30 years

**Joseph A. Leiendecker**

1914-1989

Wildlife Conservation Officer

Berks County

Retired 1975; 37 years

**James M. Spiller**

1943-1989

Semi-Skilled Laborer

Greene County

21 Years Service

# The Yellow Birch

By Karl J. Power



THE YELLOW BIRCH is best identified by its thin amber to yellowish-gray bark which peels off in thin curls. Its twigs are a favorite food of deer, and its bark is eaten by rabbits and beaver.

THE YELLOW BIRCH, *Betula alleghaniensis*, is a common hardwood throughout central and northern Pennsylvania. This medium-size "woods tree" thrives in the shadows of large canopy trees. At maturity, it reaches a height of 60 to 70 feet, with a diameter to 2½ feet. The yellow birch requires rich moist soil.

It seems that all tree species have a unique feature, and the yellow birch is no exception. Its obscure feature is found in its bark. An oily resin contained in the paper-thin curls makes it very flammable, even when wet. It makes excellent tinder for starting campfires even on bone-chilling rainy mornings.

The young yellow birch tree has a smooth bronze-color bark. As it matures, the bark becomes shiny yellow to silvery gray, with paper-thin curls on the outer layer. Oil of wintergreen can be distilled from the inner bark. Although stronger in

the sweet birch, yellow birch twigs have a wintergreen flavor if chewed.

The seeds of the yellow birch are produced each year on cone-shaped strobiles. Heavy seed producing years come at irregular intervals. The small seeds are distributed primarily by wind. Still another interesting fact about the yellow birch is found in the seeds. When seeds are first collected and dried in the fall, they require temperatures of 90 degrees or above to germinate; however, if seeds are stratified at 32 to 40 degrees for several months, as the winter months will do, they will then germinate. This germination habit is unusual, if not unique, for seed plants as a group. The seeds will sprout on anything moist. This includes old stumps and moss-covered rocks. Roots will grow over the stumps and boulders like large claws until they take hold in the moist soil.

The irregular crown of the yellow birch is caused by low hanging branches of the larger trees that grow around them. The yellow birch often grows among sycamore, hemlock, black birch, softwood poplars and basswood trees.

Yellow birch leaves are deep green in summer and turn brilliant yellow in the fall. The oval leaves are 3–4 inches long and usually about 2 inches wide. The edges are double-toothed and wider at the stem.

The yellow birch plays a role in the lives of wildlife. Aside from providing nesting sites for various birds and animals, several wildlife species feed off the trees. The ruffed grouse and many other birds, as well as red squirrels, eat birch seeds. White-tailed deer and rabbits often browse on the succulent twigs.

Man puts the yellow birch to commercial use by using the hardwood lumber for construction of furniture, paneling and cabinets. It also makes an excellent fuelwood, with beautiful flames and radiant heat.

## Thoughts While Walking

*When you reread a classic you do not see more in the book than you did before; you see more in you than there was before.*

—Clifton Fadiman





**AS I SLOWLY** turned my head and glanced over my left shoulder, the gray form of a lone deer came walking out of the mist and into view.

# First Season Memories

**By Dave Cooper**

**E**VERY HUNTING season is unique. Each one begins with renewed hopes of plentiful game and exciting days afield. Each ends leaving memories that endure, sometimes for a lifetime.

While all of my nearly 30 years of hunting in Pennsylvania have given me their fair shares of unforgettable memories, none can compare to the 1958 season, my first, and the 1987 season, my son's first.

When I look back over my boyhood years, it almost seems that I had been in training for my first hunting season. My mother was a farm girl, born and raised in Luzerne County. Most of her brothers and her one sister grew up to own farms of their own. Spending countless Sunday afternoons and every summer vacation on one of their farms was pure joy for a town boy like me. Every day was

an adventure. There were hills to roam, fish to catch, and lots of wildlife to see. Nights were spent listening to my uncles spin yarns of game bags full of rabbits, and bucks with wallhanger-size racks. Oh, how I longed to be a hunter.

## To The Rescue

But how was I to hunt without a shotgun or rifle? Who would take me? My father had never fired a sporting gun or gone hunting. Consequently, he didn't own any guns, and although he didn't discourage me, he couldn't justify buying me one on his limited salary, either. My brother, Darwin, eight years my senior, came to the rescue. He, too, had fallen under the spell of our uncles' hunting stories, and had for some time been wanting a new rifle. When the time came he presented me with his well used Winchester Model 94, 32

Special, rather than use it as a trade-in. I was thrilled beyond belief with the little carbine and was touched by my brother's generosity. He also loaned me a Savage single shot 16-gauge for small game hunting. After a considerable amount of preseason shooting and gun safety training, I was ready for my first season.

Memories from that first small game season are stamped forever in my mind: waiting impatiently for the first day to arrive, frost covered weeds on cold November mornings, cackling ringneck pheasants, chattering gray squirrels, and my first game in the bag—a small cottontail rabbit.



When buck season arrived my brother and I headed to one of the family farms in central Pennsylvania, where we would join my uncles and numerous cousins from around the state. I'd like to report that I bagged a buck, but it wasn't to be. But success is not always measured in terms of game in the bag or bucks on the meat pole. I'll never forget the three does that ran up to me, stopped and then stared from a mere ten feet away, or the biting cold, the friendly teasing, the nighttime deer stories, and the quilt covered bed at the end of each exhausting day. I became hopelessly in love with hunting.

Over the years I managed to take a number of deer with the Model 94 and other rifles. Sadly, most of my uncles

have passed away. My brother now lives in Florida and rarely makes it home to Pennsylvania. To them, however, I am forever indebted for giving me a wonderful lifetime sport and some unforgettable memories.

Fortunately, I am not without hunting companions. Many of my friends are avid hunters. Also, my nephew Ron and I get together as often as possible to hunt. Best of all, I have three sons, and we have spent countless hours together outdoors enjoying nature and wildlife.

Matthew, my 14-year-old, declared early on that he had no desire to hunt. Gradually, however, he changed his mind. After accompanying me on a woodchuck hunt, he decided to give it a try. He took to varmint hunting like a duck to water. After shooting three chucks on his first outing, hunting took on new meaning. This former reluctant nimrod began pestering me constantly to take him hunting. He had a great dove season in September, killing the first one he shot at and many more before the season ended. We had a ball hunting gray squirrels in October and November with our 22 rifles. He was definitely hooked.

**MATT SLOWLY raised his rifle and slipped off the safety. At the sound of the nearly inaudible click, the deer stopped walking and stared intently in our direction. My heart was pounding as I waited for what seemed like an eternity for his shot.**

It was on one of our November squirrel hunting outings that we noticed numerous buck rubs and scrapes in the swampy bottom near our home. Matt was thrilled at the prospect of hunting the bucks that had made them. He became quite adept at shooting his Remington 243 offhand, skillfully placing nearly every shot into the kill area of a deer target. He talked of little else but buck hunting for weeks prior to the late November opener. Nothing would please me more than for him to begin his big game hunting career by tagging an antlered deer.

Slowly but surely Matt's special day



finally arrived. The rain, which had caused me to sleep fitfully with pre-season jitters, mercifully stopped just before daylight. A foggy mist hung in the warm air as we hiked the quarter mile to our stand. We arrived there at the familiar, double trunked oak tree and settled in, side by side, just prior to the legal shooting time. Everything was extremely quiet. All we heard was water dripping from the limbs of giant oak and hickory trees.

After a rather dismal sunrise, the boy placed a clip into his rifle and chambered a round. I had previously taken a buck during archery season, so this was entirely his show. The time passed quickly as numerous gray squirrels entertained us by chasing one another through the trees in front of our stand.

The deer, if they followed patterns of years past, would come bounding or sneaking through the open woods to our front and head for the thick scrub oak and brush to our rear. But deer, as everyone knows, don't always do what's expected. About 8:45 I got an almost eerie feeling that something was behind us. As I slowly turned my head and glanced over my left shoulder, the gray form of a lone deer came walking out of the mist and into view.

"Matthew," I whispered, "deer," as I cautiously nodded in its direction. The buck, its rack now clearly visible, was a mere 30 yards away and walking directly toward our position. Matt slowly raised his rifle and slipped off the safety. At the sound of the nearly inaudible click, the deer stopped walking and stared intently in our direction. My heart was pounding as I waited for what seemed like an eternity for the shot. Just when I was sure the deer would bolt, the rifle blast came.

To my surprise, the buck took a few quick steps forward, turned and ambled back into the brush as if nothing had happened. Matthew, with mouth agape, stood there watching him walk away. Just as the deer was disappearing from view, he chambered another round, but it was too late. The buck was gone.

I had never seen a deer react in such a

manner. Most had either dropped immediately or hightailed from the scene. Had he missed? Was it wounded? Matthew, sensing my obvious confusion, said forcefully, "Dad, I know I hit that deer. If I had missed, he would have *run* away, not *walked*!" It certainly was confusing, to say the least.

We went to where the deer had been standing and searched for signs of a hit—no blood, no hair, nothing. Matt kept saying over and over, "There's no way I could have missed that deer." The only evidence that it had been there at all were tracks left in the muddy ground. We elected to follow them through the brush in hopes of finding a blood trail or, better yet, a dead deer.

### Seemed Like Forever

After tediously crawling about on hands and knees for what seemed like forever, Matt suddenly grabbed my shoulder and hissed "deer!" Four white tails waved good-bye as the deer ran through an open patch of woods to our right. They were gone in an instant, but something near where they had initially been standing caught Matt's attention. A peculiarly shaped, gray object lay on the ground beside a large fallen tree limb. As we cautiously approached, the gray lump took the form of a deer. There, lying on the ground, dead, was my son's buck, a fat, one antlered deer. He *had* made a telling shot after all, right behind the right shoulder. Never in all of my years of hunting had I felt such mixed feelings of relief, and pride in my son. Matthew, usually calm by nature, was beside himself with joy. "I got a buck, I got a buck!" he kept saying. "Aw, but look Dad, he has only one horn!" Then I explained to Matt that one horn or not, this deer was a trophy to be very proud of.

Hunting seasons, especially the first ones, are to be treasured and remembered for a lifetime. May my sons enjoy many years of nature, shooting, and hunting as I have. And may the memory of those days bring the same joy and peace of mind to them as they have to me.

**THE cooperatively managed woodlot is a great place for everybody interested in timber management to see the latest proven techniques in actual practice.**



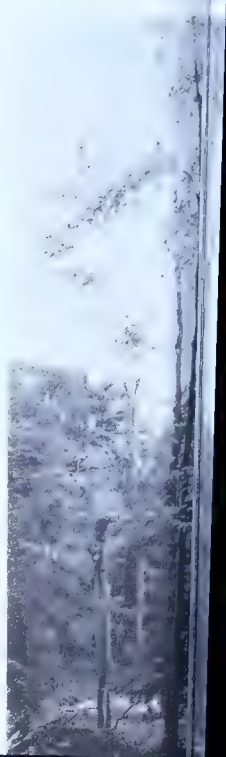
**FEATURED** at last year's tour was a recent timber harvest and a new right-of-way road. The project resulted in a net profit of \$1900, which was used to further enhance the woodlot.

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St

**A PROFESSIONAL** marked the time a cutting operation aspen—in hopes a dead snag by locks for nest



**PARTICIPANTS** could actually see how to incorporate soil conservation devices when building a new roadway through forested environments.





# Show & Tell

## Woodlot Management

An annual feature at Penn State's Ag Progress Days is a guided tour of a 30-acre woodlot that is being managed by specialists from Penn State, the Game Commission, Bureau of Forestry and the Soil Conservation Service. The purpose of the woodlot is to serve as a demonstration area where landowners can come and actually see proven timber management practices at work. If you visit Ag Progress Days this month, the 15th through the 17th, particularly if you're a landowner, take the guided woodlot tour. You'll be glad you did.



s by Willis Sneath, Northcentral Region

WCO GEORGE MOCK, above, Centre County, explains how wildlife considerations can be incorporated into timber management plans. Last year's participants, below, got to see how a right-of-way could be built and still result in a profit for a landowner. This year's features will include a wind break, to reduce home energy costs and provide wildlife habitat, and a planting of the Game Commission's seed mix for wildlife.

ester identified and removed during the standing was a large develops root suckers—nesters, and hem-scape cover.





# FIELD NOTES



## Made The Rounds

**JUNIATA COUNTY**—Early one morning last April I trapped a 220-pound bear that had gotten into the habit of raiding beehives. By the next afternoon, the bear had been to two elementary schools, where more than 200 students and adults got to see him up close and personal; appeared on television and had his picture in the newspaper; and was tranquilized, had a tooth pulled, and received two shiny ear tags before being released. I think it was an educational experience for everybody, and I hope the next time somebody sees a bear here, they grab a camera, not a gun, and that the bear thinks twice the next time he sees a beehive.—WCO Dan Clark, Honey Grove.



## Could Be

A pair of Cooper's hawks have taken up residence in the housing development where I live, taking advantage of all the birds attracted to the many feeders in the area. Blue jays seem to be the hawks' preferred prey, but it may just be that the jays' bright blue feathers are more conspicuous.—LMO R.H. Muir, Kittanning.

## Check the Spelling

**PHILADELPHIA COUNTY**—South-east Region Information and Education Supervisor Mike Schmit is sometimes mistaken for the Philadelphia Phillies former third baseman Mike Schmidt. And so it was that when Deputy Albert Lange mentioned to his 8-year-old son that Mike Schmit was going to attend our annual deputy dinner, the youngster, thinking his dad meant the baseball player, asked his father if he would get him Mike's autograph. Well, Al got Mike's autograph, and I'll never tell.—WCO Richard J. Shire, Philadelphia.

## Just Waiting

Food & Cover Corps Foreman Denny Ober and I were cleaning and repairing nesting devices on SGL 52 when we noticed a pair of bluebirds in a small clearing, apparently looking for a nest site. To help them along, we quickly erected a nest box. When we returned a short time later, we found the male perched on top of the box, with the female no doubt inside.—LMO R.J. Skubish, Akron.

## Yea, But

**SCHUYLKILL COUNTY**—While working with Fayette County WCO Stan Norris last fall I learned many valuable lessons and one not so valuable. When we returned to Stan's truck after eating lunch we found the keys locked inside. Some nearby workers came to our rescue by bringing us a coat hanger, and after some effort we got the door open. When I went to return the hanger, however, Stan turned and said to me, "Put it in the back seat in case this ever happens again."—WCO Steve Hower, Schuylkill Haven.



## Matter of Law

**FAYETTE COUNTY**—Deputy Gerald Anderson and I were conducting an investigation at a local residence when a young chap in the household interrupted us by saying “You’re Stan Norris.” I replied that I was and he continued, “You taught my hunter education class at school last fall.” We concluded our investigation a few minutes later and were ready to leave when the same boy pushed his way between his brothers and sisters and said, “Hey, Stan, wait. May I have your autograph?” I cheerfully granted the young fellow his wish and then we left—but not without a good bit of ribbing from Deputy Anderson. I guess it’s a matter of circumstances whether or not a person wants my autograph/signature.—WCO Stanley W. Norris, Fairchance.

## In The Thick Stuff

**BUCKS COUNTY**—Last March members of Pheasants Forever and I participated in a pheasant survey at Nockamixon State Park. Although there were 20 of us, no pheasants were sighted, despite the fact that PGC Biologist Fred Hartman had just released six marked birds. It just goes to show, even though birds are around, it’s often difficult to find them, especially when there’s heavy cover. So, if you have an uneventful hunting trip, don’t quickly assume there’s no game about. You may just have to work harder.—WCO Cheryl Trewella, Trumbauersville.

## Time’s of the Essence

**MIFFLIN COUNTY**—What do we do in the “off season?” Believe me, we’ve got more to do than is possible in an 8-hour day. There are speaking engagements, school programs, animal nuisance and damage complaints, in-service training, pheasant releases, landowners to contact, trees to distribute, surveys to accomplish, roadkills to dispose of, and—let’s not forget—mountains of paperwork.—WCO Timothy Marks, Milroy.



## Easter Treats

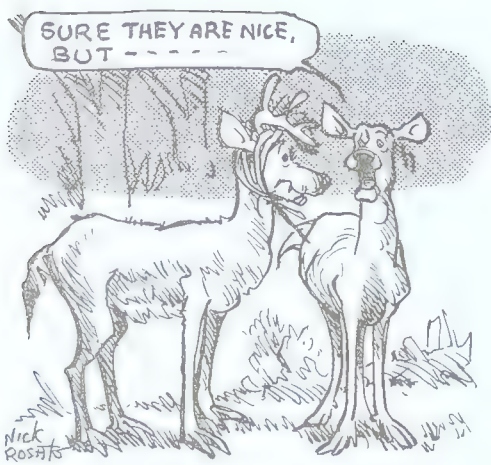
**CARBON COUNTY**—Deputy John Skerchock investigated an incident in which a bear had lumbered on to the backporch of a Nesquehoning resident on Easter Eve, carefully removed the lid on a canister full of several dozen freshly made chocolate eggs, and then proceeded to eat every last one, right in front of the dismayed resident who had planned on giving them to her children the next morning. If there’s any saving grace, the bear hasn’t been seen since, possibly because of an upset stomach.—WCO Richard E. Karper, Weatherly.

## Another Late Dropper

**CHESTER COUNTY**—I heard many reports from deputies and neighboring officers about deer still having antlers late into spring, and I saw a buck with one heavy antler on April 2. Maybe the bucks find antlers so difficult to grow in the summer that they’re reluctant to give them up.—WCO William C. Ragosta, Nottingham.

## We Are Fortunate

**GREENE COUNTY**—Right now, think of all the states you’ve ever visited. Do you know of any that has even close to the number of acres or miles of streams open to the public? Makes you feel pretty good to be a Pennsylvanian, doesn’t it?—WCO R.P. Shaffer, Carmichaels.



### Saving It

**DAUPHIN COUNTY**—Waterways Conservation Officer Barry Mechling spied a buck on March 23, still sporting its 9-point rack.—WCO Scott Bills, Halifax.

### Never Never Never

**LYCOMING COUNTY**—A woman recently told me about seeing a peacock in her yard and that when her daughter told her teacher about the bird that the teacher didn't quite believe her. Well, that's understandable. But after dealing with wildlife and people for many years, I've learned to never say never when it comes to reports of wildlife. I had a fellow correctly report a roadkilled anteater. In another instance, a woman reported a lion; it turned out to be an escapee from a circus. Sometimes we never learn where these strange and exotic animals come from. But I've learned to never say never; you just never know.—WCO Dan Marks, Williamsport.

### Don't Take Lightly

**NORTHAMPTON COUNTY**—Spring had barely arrived before I had to deal with one rabid gray fox and two rabid raccoons. I hope they weren't signs of more to come, and I also hope the public heeds our warnings about leaving wild animals alone.—WCO R.W. Anderson, Nazareth.

### Not Counting Late Small Game

**INDIANA COUNTY**—If you ever compare the costs of the many forms of recreation available, and break down those costs on an hour basis, you'll probably be amazed at how inexpensive hunting license fees really are. If an adult resident purchased all the hunting licenses allowed, his total cost would be \$39.75. If he then hunted six hours on each opening day and half of the Saturdays from early small game through muzzleloader season, he would have hunted 78 hours. His license costs, then, come to only 50 cents an hour. Compare that with the cost of any other leisure activity.—WCO Mel Schake, Indiana.



### Perspective

**WAYNE COUNTY**—It's amazing how people enjoy seeing bears, but when one wanders up on somebody's porch, it suddenly becomes our bear and they want it taken somewhere else. Maybe someday I'll discover just where it is that I can put wild animals where they won't bother anybody.—WCO Donald R. Schauer, Honesdale.

### May Be Found Anywhere

**MONROE COUNTY**—Last March a 38-pound female coyote was killed on a highway in a highly developed residential area here.—WCO David E. Overcash, Stroudsburg.



## No Excuses

**ARMSTRONG COUNTY**—The amount of litter along our back roads here is staggering. Often it's only a bottle or can, but lately I've been finding huge amounts. I just can't understand how some people can be so inconsiderate. Take warning: Anybody caught littering here—whether it's one can or 20—better expect to be prosecuted to the full extent of the law.—WCO B.J. Seth, Worthington.

## Big Differences

**COLUMBIA COUNTY**—Quite a few people are under the misconception that all state land is the same. There's a difference. State Forests are managed by the Department of Environmental Resources for multiple uses, particularly for timber production. State Game Lands, however, are owned and managed by the Game Commission, and they're managed for wildlife. Each organization has its own regulations governing public use, and these are often not the same. For example, ATVs are permitted on indicated trails on State Forests. ATVs are not allowed on State Game Lands—anywhere, anytime. So, next time you're using public land, make sure which set of regulations you must follow.—WCO George A. Wilcox, Millville.

## Run the Gamut

**BEAVER COUNTY**—Here are a few of the comments I received at the Allegheny Sports Show and my responses. "I don't like the bonus deer system. Four of us each got our two deer at camp, and now the area's cleaned out." "You might each consider taking one deer at camp and another around home." "I love that bonus deer system. My buddy and I each got two deer in Washington County, and it seemed like everyone was getting deer." "Great." "Why do you sell so many licenses in Washington County? We hunted there for three days and saw hardly any deer." "You should have been here two minutes ago." —WCO Steven M. Spangler, Beaver.

## Safe & Successful

**SNYDER COUNTY**—Last spring Joe Walter, Mt. Pleasant Mills, killed a gobbler with his bow, bringing to six the number he's taken that way. Furthermore, Joe won't shoot until the bird is within 20 yards, and he always places his fluorescent orange cap above him in a tree while he calls.—WCO John Roller, Beavertown.

## Get 'Em Now

**ELK COUNTY**—Now's the time to make arrangements to attend a hunter-trapper education class. Remember, the class is mandatory in Pennsylvania for all first time hunters and trappers (regardless of age), and it's also required in many other states, regardless of a person's hunting experience. Try to attend a class early. Don't wait until the major hunting seasons are about to begin because nearly all courses will be over by then. It's also a good idea for parents to attend the class with their beginning sportsmen.—WCO Dick Bodenhorn, Ridgway.



## Most Welcome

**McKEAN COUNTY**—Last fall a Safety Zone Cooperator's farm was overrun with rats, despite the many cats around. But then, in the winter, a mink took up residency in one of his hay lofts. By spring very few rats remained, and the farmer hopes the mink never even thinks of leaving.—WCO James E. Rankin, Port Allegany.

## Don't Leave Behind

A Ridgway sportsman was walking through the woods when he flushed a grouse. He then took a couple more steps and saw another grouse flopping around on the ground. The bird was tangled in a ball of string. He told me that string had been strung throughout the woods as though somebody had marked a boundary or trail. Whatever, the string was causing problems. Please, if you take anything into the woods, take it out when you leave. — LMO Robert J. Rea, Ridgway.

## Early Start

**UNION COUNTY**—Gary Struble, ranger at Camp Karoondinha, saw a doe with two small, spotted fawns on March 27. — WCO B.J. Schmader, Millmont.



## Knows The Time

**BEDFORD COUNTY**—Live trapping and relocating beavers is always an educational experience. Last April I “served eviction notices” on a colony in Rays Cove. The first night I caught a 57-pound female, but the dam was repaired and the water rose, drowning the beaver before I arrived. The second night I caught two beavers in one trap, but while opening the dam I lost my wristwatch. I never caught the last beaver. It was as if he knew when I was coming and going. I did catch a glimpse of him once, though, and it appeared he had something shiny on his left front leg. — WCO Dave Koppenhaver, Everett.

## Seeing The Results

It was most rewarding for me when I returned to a site where I had planted various seedlings years ago and found that not only were the trees and shrubs bearing fruit and providing cover, but also were being used by wildlife. — LMO Barry S. Zaffuto, Ebensburg.

## Had Better Days

**BRADFORD COUNTY**—On just one day last spring I picked up one roadkilled beaver, two roadkilled mink, four deer, a bear killed for crop damage, and a hawk killed when it hit a window while raiding a bird feeder. — WCO Ed Gallew, Wyalusing.

## Good & Bad

The mild winter we had was certainly easy on wildlife. However, in my travels I noticed that many people were able to work outside, cleaning fence rows and clearing creek banks. Consequently, a lot of habitat that was available last fall is now gone. — LMO Dick Belding, Waynesburg.

## Probably Not

Last spring I found five American chestnut trees, each marred by the tell-tale ring of blight, that had been pulled down by a black bear. The piles of hulls scattered around each tree indicated a bumper crop, despite last year's drought. I just wonder if the bear had a sticky time removing the sweet nuts from their prickly hulls. — LMO Stephen L. Opet, Tamaqua.

## Wouldn't Get Far

**SCHUYLKILL COUNTY**—As I watched a squirrel carry an entire ear of corn in its mouth I realized he was performing quite a feat of strength. Considering how much the squirrel and the corn each weighed, I figure that's the equivalent of a person carrying home from the store a week's worth of groceries in his mouth. — WCO John Denchak, Gordon.





**DOUGLAS CLEMMER**, Green Lane, who dropped this 205-pound 8-point in Montgomery County, was among the 9866 bowmen who tagged Pennsylvania whitetails last year.

## Archers Break Record Again

PENNSYLVANIA'S archers are continuing their habit of breaking deer harvest records—they did it again in 1988, for the fourth consecutive year.

Bowbenders submitted cards on 9866 whitetails last year, breaking the old figure of 8950 set in 1987. That mark shattered the previous record, 8609, set in 1986.

"Archery license sales in 1988 were

slightly higher than the preceding year, so the new record might be partly attributed to the fact there were more archers afield last year," said Dale Sheffer, wildlife management bureau director. "There were 254,770 archery licenses sold in 1987, and although 1988 returns are not yet complete, we have recorded 263,566 archery license sales for last year.

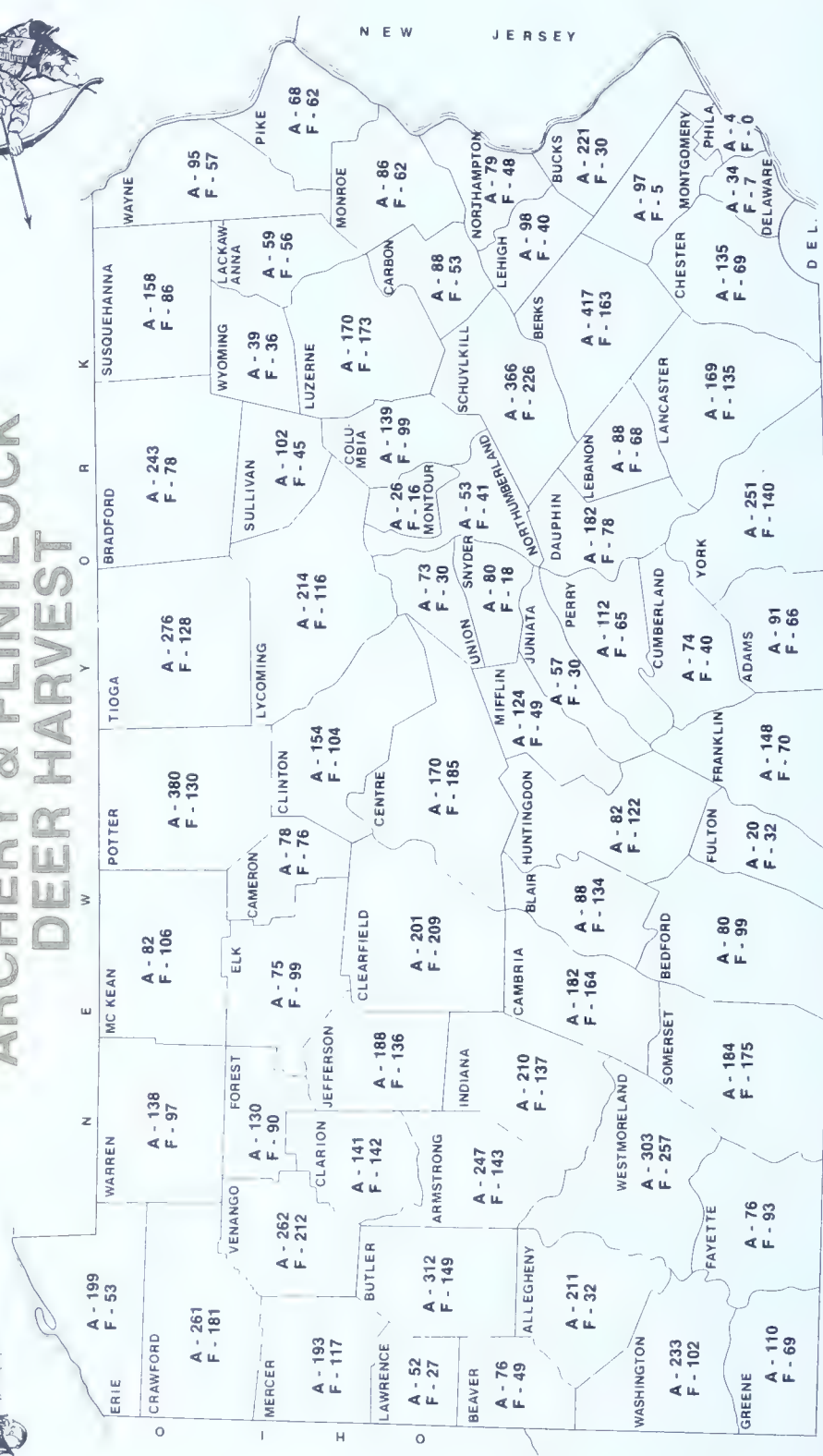
"More than ten percent of all archery hunters in the United States buy licenses in Pennsylvania," Sheffer points out. "Yet, when archery license sales peaked at 283,670 in 1983, archers reported taking only 6342 whitetails.

"Another factor possibly accounting for the record-breaking harvest would be the availability of bonus tags. A hunter who knew there was a good chance of getting a bonus tag would probably be more likely to take a deer that presented a good shot in the archery season.





# 1988 REPORTED ARCHERY & FLINTLOCK DEER HARVEST



ARCHERY (SYMBOL - A)		FLINTLOCK (SYMBOL - F)	
ANTLERED	6,221		408
ANTLERLESS	3,613		5,798
COUNTY UNKNOWN	32		23
TOTAL	9,866		6,229

GRAND TOTAL ARCHERY HARVEST .....	9,866
GRAND TOTAL FLINTLOCK HARVEST .....	6,229



**NEIL ADAMS**, Langhorne, stayed in Bucks County to get this trophy. It weighed 207 pounds, field-dressed, and the 10-point rack has a 20-inch spread.

“Then, too, we’ve spotted a change in the ratio of antlered and antlerless deer tagged by archers. For years, the harvest was nearly evenly divided between the two groups. In 1988, however, bowmen reported taking 6221 bucks and 3613 antlerless deer,” he noted.

Last year flintlock hunters reported taking 6229 deer, a higher figure than the 5193 reported in 1987. Muzzleloader license sales totaled 78,862 in 1987, while incomplete returns for 1988 show 91,674 muzzleloader licenses sold.

The all-time muzzleloader harvest figure was 8246, in 1981, when hunters could have both muzzleloader and antlerless deer licenses. That year 145,144 muzzleloader licenses were sold.

Archers were most successful last year in Berks County, reporting 417 deer, followed by Potter, 380; Schuylkill,



366; Butler, 312; and Westmoreland, 303. Flintlock harvest leaders were Westmoreland, 257; Schuylkill, 226; Venango, 212; and Clearfield, 209.

## 4.7 Million Seedlings

**W**ILDLIFE will soon benefit from over 4.7 million tree and shrub seedlings planted this year to improve wildlife habitat throughout the state. The seedlings, produced at the Game Commission’s Howard Nursery, Centre County, were distributed throughout the state by the end of April, in advance of Arbor Day.

Arbor Day was established nationally to encourage tree plantings for the benefit of mankind. The Game Commission’s activities are just part of this total effort to improve our environment through natural processes.

More than half of the Game Commission’s seedlings were planted by agency

personnel on state game lands. In addition, seedlings were distributed for planting on Forest-Game, Farm-Game and Safety Zone projects, where private landowners permit public hunting.

About 200,000 seedlings were sold, at minimal cost, to individuals through the agency’s Planting for Wildlife program.

Also receiving seedlings were sportsmen’s groups, special research projects, conservation clubs, soil and water conservation districts, other commonwealth agencies, coal stripping operators, and others for planting to provide wildlife food and cover on lands open to public hunting.

## Game Commission Publications & Items

Quantity	Books	Price
_____	BIRDS OF PENNSYLVANIA, by James & Lillian Wakeley .....	\$ 10.00
_____	THE WINGLESS CROW, by Charles Fergus .....	\$ 10.00
_____	PENNSYLVANIA BIG GAME RECORDS, 1965-1986 .....	\$ 10.00
_____	MAMMALS OF PENNSYLVANIA, by J. Kenneth Doult, et al .....	\$ 4.00
_____	GONE FOR THE DAY, by Ned Smith .....	\$ 4.00
_____	PENNSYLVANIA WILD GAME COOKBOOK .....	\$ 4.00
_____	DUCKS AT A DISTANCE .....	\$ 1.00
_____	WOODLANDS AND WILDLIFE .....	\$ 2.00
_____	PENNSYLVANIA TRAPPING MANUAL, by Paul Failor .....	\$ 3.00
_____	WOODWORKING FOR WILDLIFE .....	\$ 3.00
<b>Working Together For Wildlife</b>		
_____	1989 ART PRINT "Last Glance" .....	\$125.00
_____	1988 ART PRINT "Snowy Egret" .....	\$125.00
_____	1987 ART PRINT "Autumn Challenge" .....	\$125.00
_____	1986 ART PRINT "Country Lane Kestrel" .....	\$125.00
_____	1989 WHITETAIL DEER PATCH .....	\$ 3.00
_____	1988 SNOWY EGRET PATCH .....	\$ 3.00
_____	1987 ELK PATCH .....	\$ 3.00
_____	1987 ELK DECAL .....	\$ 1.00
_____	1986 KESTREL PATCH .....	\$ 3.00
_____	1986 KESTREL DECAL .....	\$ 1.00
_____	1985 BOBCAT PATCH .....	\$ 3.00
_____	1985 BOBCAT DECAL .....	\$ 1.00
_____	1984 BLUEBIRD PATCH .....	\$ 3.00
_____	1984 BLUEBIRD DECAL .....	\$ 1.00
_____	1983 OTTER DECAL .....	\$ 1.00
_____	1982 OSPREY DECAL .....	\$ 1.00
_____	1981 FLYING SQUIRREL PATCH .....	\$ 3.00
_____	1981 FLYING SQUIRREL DECAL .....	\$ 1.00
<b>Wildlife Management Areas</b>		
_____	PYMATUNING WATERFOWL PATCH .....	\$ 2.00
_____	PYMATUNING WATERFOWL DECAL .....	\$ 1.00
_____	MIDDLE CREEK PATCH .....	\$ 2.00
_____	MIDDLE CREEK DECAL .....	\$ 1.00
<b>Pennsylvania Bird and Mammal Charts</b>		
_____	Set #1 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set #2 (4 charts) 20" x 30" .....	\$ 4.00
_____	Set #3 (8 charts) 11" x 14" .....	\$ 4.00
_____	GAME NEWS Cover Prints (4 by Ned Smith) 11" x 14" .....	\$ 4.00
_____	State Symbols Chart 20" x 30" (Deer, Grouse, Hemlock, Laurel) .....	\$ 2.00
<b>Sport Items</b>		
_____	Bronze SPORT Tie-Tac/Lapel Pin .....	\$ 3.50
_____	SPORT Patch .....	\$ 1.00
_____	SPORT Hat (One Size Fits All) .....	\$ 4.00
_____	Fluorescent Orange Safety Alert Band .....	\$ 3.00
_____	GAME NEWS Binder (Holds 12 Issues) .....	\$ 5.00
<b>Waterfowl Management Stamps (Voluntary)</b>		
_____	1989 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1988 Waterfowl Management Duck Stamp .....	\$ 5.50
_____	1987 Waterfowl Management Duck Stamp .....	\$ 5.50

Mail orders along with remittance (do not send cash) to Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797. Checks should be made payable to: Pennsylvania Game Commission. U.S. currency only.



# Having Fun

**H**AS LIFE gotten too serious lately? Did the "new" car expire along with its warranty? Did you have to sign for the last letter the bank mailed you? On your birthday, were you able to count the years in gray hairs instead of candles on your "no cholesterol, no fat, low sugar, no salt" bran birthday muffin? Where's all the fun gone anyway?

If you're a person of "a certain age," mid-life may have you in its Ben-Gayed grip. Even hunting may have gotten too serious. Are you spending more time attending meetings about hunting/shooting issues and less time out there doing it? Have your days afield become no-nonsense, skill-testing, game-getting trials? Or are you mired in the muck of middle age guilt, unable to live up to expectations, didn't bag an all-time great trophy with an all-time great shot? Has the fun gone out of your hunting, as well?

Perhaps you've been applying the same intense effort to achieving hunting success that you do in your career, but are finding you enjoy your days afield less. The hours spent hunting should be "play" time, when you get away from the stress of the workday world and its pressures to produce. Hunting shouldn't create worry lines, but erase them. It's easy to fall into today's "yuppie" trap of viewing everything as a serious business, and needing to be tops at it. We need, instead, to remember to have some fun with life, especially hunting, along the way.

One of the best, if not the only good thing about being "mature" is that a person has the wisdom of experience to put life into perspective. He can separate the important from the trivial, knows and accepts his strengths and weaknesses, without the nail-biting anxiety of youth. The truth is, you finally realize, that if you never take that record book buck, so what? If no one ever calls you "Ol' Dead Eye" for your shooting skill, so what? If, instead, you miss a 50-yard shot at a three-inch, single-horn spike,



**IF YOU THINK** hunting has gotten too serious lately, give the sport a try with a bow or muzzleloader, hunt different game animals, try new areas, and spend some days afield with some new hunting companions.

so what? No one, including ourselves, should judge hunting performance. The only part of the sport that is graded pass/fail is whether we're having fun.

If you're looking to revive the fun in your hunting trips, to regain at least that part of youthfulness, here are a few tips for the upcoming season.

*Try Something Completely Different.* As a child, everything you did was new and exciting. Use that formula to recreate the past. If you're a "settled" rifle deer hunter, buy a bow, revolver, or

## Another View...

by Linda Steiner

muzzleloader. Take a friend up on his invitation of night hunting for raccoons, or float the river for ducks. A sure sign of age is a stubborn, "I don't do that," reflecting fear of making mistakes, of the unfamiliar, of getting laughed at. You might find that laugh is the most enjoyable part of the day.

### Someplace New

*Hunt Someplace New.* Hunting the same old spot year after year has its good points. You learn the terrain and game runs like the back of your hand. But staring at your knuckles gets boring, even if you do know them better than anybody else. The odds makers may say that going elsewhere will reduce your chances at bagging game, but your likelihood of having fun again will be greater. Rediscover the pleasure in discovery. Find out if the grass really is greener, the grouse fatter, someplace else. Or, simply savor the difference for itself, whether or not the game bag gets filled. Hunting is not a test, though who has the most fun at it is always contestable.

*Change Your Hunting Companions.* I'm not suggesting you abandon old friends, but everyone knows someone to whom they've said, "We ought to get together sometime," but never do. Expand your social contacts with hunting trips. Turn acquaintances into friends and solidify friendships. Old stories become fresh with a new listener. Vary the ages of your hunting partners by inviting a youngster or an older person, to enjoy their unique points of view. A lot of the

happiness of the day will be in what you give each other, not in the shots taken.

*Be Ready For Serendipity.* Let yourself be sidetracked. Singleminded seriousness in pursuit of game might mean more steaks in the fry pan, but may not guarantee the most fun. Let the moment guide you to unexpected good times. If you're deer hunting but want to turn away to follow some turkey tracks, just to see where the flock is going, do it. Do what will please you most at the moment. Don't feel guilty about playing "hookey" from what you're "supposed" to be doing. You might even decide what you really want to do is get out of the cold rain and go down the road for hot coffee and homemade pie. That's okay, too. Hunting time should never be so structured it precludes unforeseen fun.

*Throw Away The Book.* Experts' how-to advice is fine, as long as it's not regarded as "how thou shalt hunt" pronouncements. Hunt your own way, at your own pace, for your own enjoyment. If all the experts say the way to take deer with a bow is from a tree stand, but you don't feel good about having your feet anywhere but on solid ground, then stay on terra firma. So what if, statistically, your chances are reduced? What do statistics know about fun or luck?

Although hunting should be closer to play than to business, there are parts of the sport that can never be taken too seriously. These are observing firearm safety and adherence to the Game Law. In those instances, the Responsible Adult in us should always be in charge. As for the rest, let the kid inside take you hunting this fall, and leave the stodgy middle-ager in the mirror at home.

LINDA STEINER recently garnered the Pennsylvania Outdoor Writers Association's "1988 Best Magazine Column Award" for her GAME NEWS column "How Irony," which appeared in the July issue last year. Linda received the award during POWA's spring meeting, held this year in Meadville.

Joe Workosky





# Fun Games

## “Everything’s Just Ducky”

By Connie Mertz

Unscramble the following species of ducks.

Clue: These are “puddle” ducks; they feed mainly on the water surface

KACLB CUKD

\_\_\_\_\_○\_\_\_\_\_

NIWEOG

\_\_\_\_\_○\_\_\_\_\_

HORERNNT TANILPI

\_\_\_\_\_○\_\_\_\_\_

NENROTHR VEEHSORL

\_\_\_\_\_○\_\_\_\_\_

Clue: These are “diving” ducks; they obtain their food mainly underwater.

GIRN-KENEDC KUDC

\_\_\_\_\_○\_\_\_\_\_

SSEREL CPAUS

\_\_\_\_\_○\_\_\_\_\_

FLEHEFUDAB

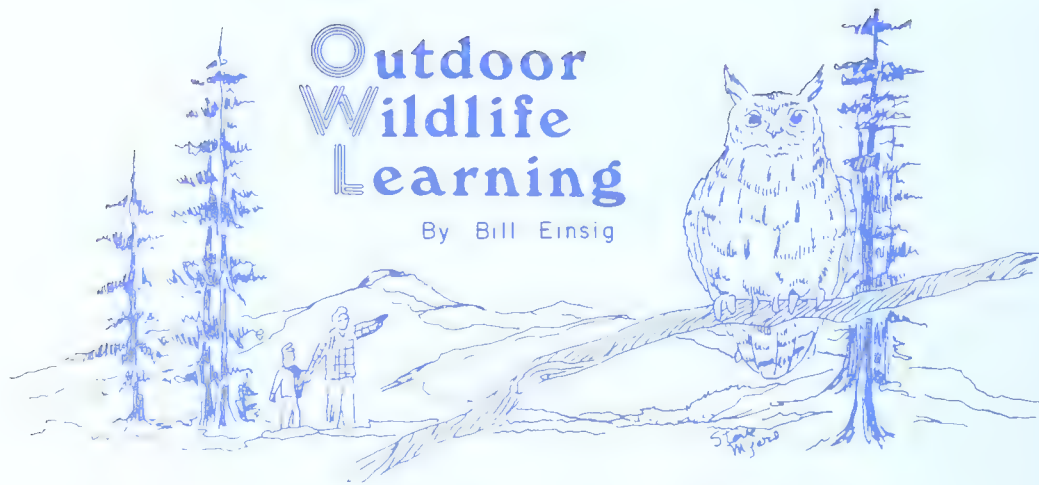
\_\_\_\_\_○\_\_\_\_\_

MOONMC EGENOYELD

\_\_\_\_\_○\_\_\_\_\_

What type of habitat do these ducks need? Place the circled letters in the blanks, then unscramble.

\_\_\_\_\_



## Woodworking for Wildlife: A Tool for Teachers

**D**ID YOU ever consider building a house in your backyard for bats? How about a loafing platform for turtles? Plans for these unusual structures are among the 22 designs included in "Woodworking for Wildlife," a new publication that shows how to build nesting, resting and roosting shelters for more than 40 species of animals.

The plans in the book will obviously help people enhance wildlife conditions on their own properties and probably on many other acres as well. Cavity nesters of various kinds need nest sites in woodlots where snags and den trees are scarce, and in field edges where clean fencerows provide little cover and few nesting possibilities. Many other users of this book will build structures simply to attract the wild creatures they enjoy watching.

More than they realize, perhaps, the authors have opened a new pathway for bringing kids together with the world of nature. Creative teachers with a love for wildlife will find novel ways of turning these plans into effective teaching aids, and many students, perhaps bored with simple textbook reading, will become excited about building and using these structures to learn about wild animals.

Some of the shelters are appropriate for placement on the typical school campus. Just as many teachers have helped students build and erect bluebird boxes, they also could provide boxes for chickadees, house wrens, even mice. These animals

are each fascinating studies in behavior and adaptation, and they are easy to observe. "Woodworking for Wildlife" offers an easy plan for a small box that accommodates those species as well as several other small birds.

Another project that lends itself to use around the school is the nest shelf. Robins, barn swallows and eastern phoebes will readily nest on such open platforms, and if the shelves are placed right, students can watch from start to finish.

The simplest nesting aid described in the book is a wire basket cut from a square foot of hardwood cloth. This concave screen should be placed in the fork of a branch in a pine or spruce tree. It provides a nesting base for mourning doves and is so simple every student in the class could make, and monitor, one of their own.

### Room Displays

Even if the boxes cannot be placed outside, they certainly can create a dramatic display within the classroom. A collection of variously shaped boxes, with different hole sizes and mysteriously placed openings, will spark questions. Just imagine hanging on the classroom wall a box filled to the brim with compacted sawdust. What bird would use a box like that? Is that sawdust supposed to be in there?

Such questions provide the perfect opportunity to explain that flickers excavate their own nest cavity, and that the box simulates a dead tree with soft inner



wood. The flicker will remove sawdust from the box until the cavity is just the right size for its nest.

The plans for each nesting structure offer clues to the animal's behavior and to peculiar adaptations of that species. As a result, demonstration boxes hanging in the classroom are excellent teaching aids.

## Student Projects

There are always students looking for some project they can do with their hands. Some students learn better this way and, for them, construction of a usable nesting box or platform may be more appropriate than a written report.

Older students can follow the plans as given. Most designs have been modified so only straight crosscuts and simple joints are needed. Younger students will benefit by having the pieces already cut to size. Some teachers might even want to drill pilot holes in some boards to indicate where nails should go. For many kids, getting the nail started straight is the main problem.

## Learning Stations

Several years ago our environmental center produced several nesting boxes that fit together with wooden pegs. It has been a popular activity station with students of all ages ever since.

The box was first assembled with light finishing nails. Then holes were drilled where nails usually go. The box was disassembled and wooden dowel pegs glued into the sides and bottom to fit holes in the top, front and back. The pieces were not labelled in any way, so students had to match pegs to holes to assemble the box.

Several of the plans in "Woodworking for Wildlife" can be easily modified in this way. The boxes designed for small birds and the nesting shelves would make excellent puzzles.

## Math Challenge!

Here is an interesting idea for students who like to build models or who need

some extra practice working with fractions. Using the detailed plans in "Woodworking for Wildlife," build a miniature nesting box at one-half or one-quarter scale. Students may use cardboard, posterboard or balsa glued together to construct their scale model. One advantage of this approach is that students can use materials and simple tools already familiar to them. Expect students to convert all dimensions first, then layout the pieces, cut and assemble.

## Ice Cream Pails and Coffee Cans!

This final idea will tap the creativity of students like no other. Challenge them to devise nest boxes of their own design from commonly available materials. They should first evaluate the plans in "Woodworking for Wildlife" and identify certain critical features of each design. For example, hole size is usually very important. Often, the floor-to-hole distance is critical. These key elements should be carried over to the new design, but other than that, be creative!

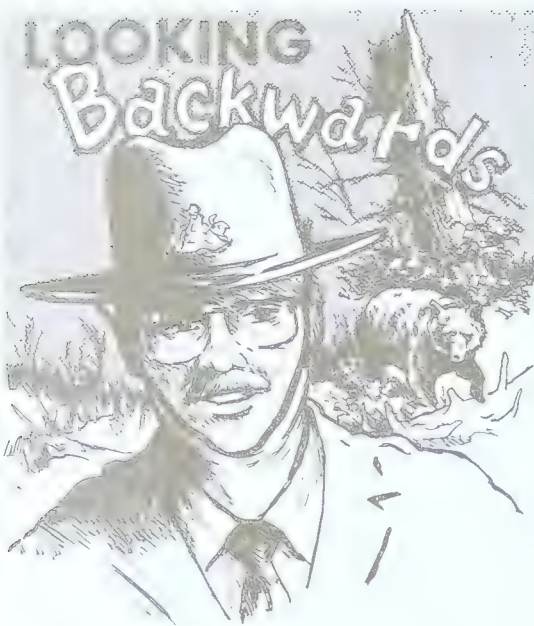
As a matter of fact, "Woodworking for Wildlife" includes a plan for such a home-grown shelter. Plastic buckets are used to create wood duck nest boxes. Buckets are cheap, available and they work.

When students complete their creations, put them on display for the rest of the school. Then, put them outside in appropriate habitats and see which are used.

"Woodworking for Wildlife" was published by the Wild Resource Conservation Fund and the Pennsylvania Game Commission. Your contribution through the income tax check-off helped make this book possible. Order your copy from the Game Commission or the Wild Resource Conservation Fund, P.O. Box 1467, Room A1-85, 3rd and Reilly Streets, Harrisburg, PA 17120. Price is \$3, delivered.

## Middle Creek Wildlife Art Show

An art show featuring the works of 25 wildlife artists is being held at the Middle Creek Wildlife Management Area Visitors Center. The show will run from 12 noon to 8 p.m. on Friday, August 25; 9 a.m. to 8 p.m., Saturday, August 26; and from 10 a.m. to 5 p.m. on Sunday, August 27. Admission is free.



**By Jack Weaver**

Wildlife Conservation Officer  
Centre County

**I**S THIS WHAT it's like to have a heart attack, I wondered. Breathing was hard. I just couldn't get enough oxygen as I labored to suck in big gulps of air. And I was soaked. Streams of sweat poured down my face and neck, forming a raging river between my shoulder blades. The river drained into a great swamp between my back and the vinyl seat of the Game Commission's Jeep Cherokee. Likewise, a large creek overflowed its banks across my chest, soaking the front of my shirt. It was only 94 degrees, but the humidity was over 95 percent. No air was moving at all. A breeze, even a warm one, was just a dream. I slid off the vinyl seat with a squishing sound to stretch my legs in the hay field where I was parked. As I stretched, the swamp began to drain down the seat of my pants, eventually forming a small lake in my socks. What in the world am I doing here, I wondered. I should be home in the shade, sipping something cold and wet. But I knew why I was here, as I swept my 7 x 35s for the thousandth time over the freshly mowed fields just south of the little town of Roseville. Yep, the woodchucks were still there, feeding peacefully. I wondered if they were sweating as much as I.

The rolling hay fields of northern Tioga County provide some of the best woodchuck habitat in the state. Dyed-in-the-

wool chuck hunters from all over Pennsylvania frequently journeyed here during the summer months for some choice shooting. Generally, they were law abiding. Some families from down near Beech Creek spent a couple weeks vacation each summer just to hunt chucks here. They camped near where I was now. They always kept the meat, canning it back at their camp site. Still others were long distance shooters, setting up with range finders and portable benches on some grassy knoll—with the landowner's permission, of course. They would take chucks at 500 to 700 yards. All of those hunters were generally welcomed by the local farmers, who didn't particularly like woodchucks. Woodchucks were plentiful and they caused a lot of damage to farm machinery. Some farmers had even been killed when tractors flipped over after hitting a chuck hole on a steep sidehill. But the rural dirt roads that meander through this county were too much of a temptation for road hunters. And no matter how badly farmers disliked woodchucks, they seemed to despise road hunters even more. Seldom did they fail to turn them in or at least report their activities. And that's why I was here, melting in the August humidity.

Some people are under the impression that wildlife officers just drive around and pick violations like summer fruit. It's not that simple. I'd been sitting here dehydrating for nearly four hours. But the woodchucks were out, and I knew it was just a matter of time before some road hunter drifted by. Driving around myself seldom worked because the violators would usually see me coming in my big, marked greenie, and behave themselves until I left. In my district someone or another was generally always out cruising for chucks in the evening. They just didn't always do it where I was. It took a lot of discipline to wait for them to come to me. But, in the long run, stake outs usually paid off.

A red pickup came cruising down toward Roseville, then it turned on to one of the dirt roads I was watching. It slowed down abruptly and began to crawl toward one of the mowed fields where chucks were feeding. I was about three quarters of a mile from them, on a hill overlooking the whole scene. I knew from experience that from this distance I probably couldn't see what they might shoot at, so I kept my glasses on the pickup. When the truck



came abreast of the field it stopped. I saw a barrel poke out of the window on the passenger's side. I held my breath and before long the soft crack of a 22 came drifting across the open space between us. I quickly scanned the field. Woodchucks were scattering everywhere. The pickup had started moving again as I jumped in my vehicle and headed down toward them. By the time I got down to the township road where they had shot, they had gone on up the road and turned into a farm lane. From there they started driving up through an adjoining field. I came reeling up the road in a cloud of August dust. They spotted me and swung back toward the farm lane. I met them there.

I walked over to their truck and, although I was in uniform, I nonetheless identified myself as a game protector. I then ordered them to hand over the rifle that was between them on the seat. It came out barrel first—they usually do. It was a Marlin, and although it was empty, it smelled like it had just been fired.

"What do you want?" demanded the driver, an arrogant young man in his late teens or early 20s.

"I just watched you guys shoot right out the window when you were back on the township road a few minutes ago." Boy, that wasn't what he wanted to hear.

"We didn't shoot at anything," he snapped.

I fixed him with the most disgusted look I could muster, and then took the gun over to my vehicle. I grabbed an information pad and walked back to their truck. "Let me see your hunting license."

"We don't need licenses to hunt on private property," he said. "Besides, we were just target shooting."

"Oh?" I asked.

"Yea, we shot at a rock back there," he explained. "Besides, this is my father-in-law's farm. I can drive on the fields, too, just so you don't hassle us over that," he sneered.

This young man certainly wasn't endearing himself to my heart. "Do you live on this farm?"

"I live in Blossburg, but I help out here all summer," he added.

"Where do you work full time?" I asked.

"None of your business," he snapped.

My eyes flashed. "I asked where you work, mister? And, while you're at it, I want to see your driver's license."

"Oh, man!" he complained, as he reached for his wallet. "You don't need a



license to shoot blackbirds do you?" He nodded toward the passenger. "He shot at a blackbird."

"Sure," I said. I took his driver's license and walked around the truck to the passenger's side. This boy seemed younger. He remained quiet and looked nervous. "Let me see your hunting license," I said.

"I don't have it with me," he said meekly. He wouldn't look at me. He just kept staring at the floor.

"Step out here," I said. He slid off the seat and stood there with his hands in his pockets and his head down. Two empty 22 casings lay on the floor. I picked them up and put them in my pocket. "How old are you, son?" I asked.

"Seventeen," he replied.

"You don't have a hunting license, do you?" I said. He shook his head, no.

"Hey, cut us a break!" the driver yelled through the open window. "He missed the chuck anyhow."

"That's not the point," I said. "You guys had a loaded rifle in the vehicle, and you shot from inside a vehicle. That's using a vehicle to hunt. Plus, you don't have any licenses. And, you've been lying to me since I stopped you."

"My hunting license is at home," he replied. "I just don't have it with me."

I turned to the lad standing there staring at his feet. "Where do you live?" I asked.

"Millerton," he replied rather shakenly.

A warning flashed. Millerton is only about a half mile from the New York State line. This boy may or may not live in Pennsylvania. He seemed to be getting more nervous. He was kicking small stones around. "You don't live in Pennsylvania, do you?" I asked. His head snapped up. It was the first time I had eye contact with him. He didn't say anything, but I divined he lived in Pennsylvania.

His buddy yelled through the truck window again, "He just moved up from Florida."

Looking into the boy's eyes I asked firmly, "When?"

**His head went down again and with another kick he scattered some more of the driveway into the field.**

"Last week," he said. "I'm staying with my aunt. But, I moved up here for good," he added cheerfully. His head came up again, and his eyes looked hopeful.

I just shook my head and explained that a person had to reside in Pennsylvania for at least 60 consecutive days before being eligible for a resident hunting license. (Today that restriction is only 30 days.) I recorded all the information I needed. "Tell you what I'm going to do, fellows," I said. "You're entitled to a hearing if you want one. I'll set it up in Mansfield. I'm going to keep the rifle as evidence until the case is finished. Then you'll get it back. Or, if you prefer, you can settle this thing with me, out of court, on a field receipt. It's up to you."

"We'll settle it with you," the mouthy one said. "But what's the charge?"

"Well, the primary violation I'm concerned with here is hunting from a vehicle. That's 50 bucks each." (Today the same violation would cost \$300.) "Considering the younger lad isn't working anywhere, we'll let it go at that for now. But," I said to the driver, "you make sure you bring your hunting license along; I want to see it." The boys showed up the next night and paid their fines. They also lost their hunting privileges for the following year. We hope the boys in this case learned a lesson from their mistakes.

Road hunting is a serious infraction. Not only is it unsporting and unsafe, but it also projects the worst possible image of sport hunting to an ever scrutinizing public. We continued to work road hunters over the years, during the summer months and on into the fall. Road hunting violations also often included shooting in Safety Zones as well. As an example, it was in August of 1977 that I received a call from an irate homeowner.

This lady reported that three young men stopped a Ford van in front of her home. Then they got out and shot from the berm at a woodchuck in an adjoining field. They were only about ten yards from her home, 25 yards from a neighbor's house, 75 yards from another, and 120 yards from a house that was in their direct line of fire. And, there were children at several of those homes. They didn't seem to care, though, because the following day they

went back and harassed some of the witnesses for turning them in. But then I harassed them, and they decided to settle up everything on a field receipt, to the tune of \$125 and loss of hunting privileges for a year. Generally, the undesirables who engage in road hunting don't care about the safety or the property of others. In 1973, though, some road hunters up from Philadelphia threw in a new twist.

One morning some people at a camp situated at the base of Armenia Mountain heard a car slowly approaching up their road. Their camp was located at the end of a remote township road in Covington Township. After a bit they heard the car stop and a lone shot ring out. Fearing someone had shot a deer, they jumped in their car and drove down the dirt lane. Two men were standing outside a station wagon. They had blood on their hands, and it appeared that some others had just jumped into the vehicle. There were four in all, two men and two boys. The campers pulled in front of their vehicle and got out to talk to them. At first the men denied that they had even shot. But when the campers spied a partially gutted rabbit lying in the ditch, the guys told them they had shot the rabbit in mistake for a woodchuck. The campers took their vehicle license number and found out where they were staying. Then they called me.

When I finally tracked down the men in the station wagon they claimed they thought they were shooting at a woodchuck, but the animal turned out to be a rabbit instead. I pointed out that such a mistake was highly unlikely because the grass in that field hadn't been mowed and was about four feet high. Finally, the older man admitted to shooting the rabbit, just to show the boys that rabbits have worms in the summer, and that's why you shouldn't shoot them out of season. I pointed out that breaking the law to conduct an object lesson on why one shouldn't break the law wasn't a good excuse. Each adult paid a \$10 fine. That wasn't much for killing a game animal out of season, but they also lost their hunting privileges for a year.

Over the years August produced several illegal deer cases and an illegal bear case. It also provided some interesting experiences trapping and transferring problem black bears. But those are stories for another time.



# Thornapples



*Chuck Fergus*

**I**N APRIL 1974, the firefly became the official state insect of Pennsylvania, joining the pantheon of creatures, plants, and substances deemed to exemplify the Keystone State: the ruffed grouse (state bird), hemlock (state tree), white-tailed deer (state animal), brook trout (state fish), mountain laurel (state flower), milk (state beverage), and Great Dane (state dog). Governor Shapp (remember him?) signed the firefly bill, which had been introduced by two Delaware County legislators on behalf of Dorothy B. Holzworth's third grade class at Highland Park Elementary, Upper Darby.

The class had started with a list of ten popular insects and cut it down to three: the firefly, the ladybug and the praying mantis. Several of the pupils were somewhat squeamish about the mantis, the female of which, in typically gruesome insect fashion, kills and eats its mate; and the ladybug already had been claimed by another state; so the firefly won by a comfortable margin.

The gentle firefly, whose blinking yellow-green light spangles the summer meadow. Whose acrid odor recalls, for many adults, simpler days when the major concern was whether Mom and Dad would let one stay up late, to go firefly collecting under the deepening midsummer sky: one learned to crouch below the flashing insect, frame it against the purple-blue horizon, and snatch it with a cupped hand; open the

mayonnaise jar's lid (air holes punched in it with a hammer and nail) and stuff the firefly in through the crack, to join the flashing others. The jar would sit on the floor by one's bed. One would waken in the night to look at it. One did not have to go to school the next day, or the day after that, or the day after that. Some of the fireflies would not flash, but would sit propped up against the glass, glowing faintly; others would hang onto the torn metal on the bottom of the lid and light up like green neon. In the morning the captives would all be set free; one could catch just as many that night, if Mom and Dad would let one stay up late again.

There are over 2000 kinds of fireflies in the world, most of them in the tropics. North America has around 50 species. Fireflies are also called glow-worms and lightning bugs, although they are neither worms nor bugs nor, for that matter, flies, but rather soft-bodied beetles of the family Lampyridae, based on an old Greek word that also gives us "lamp." Most North American fireflies spend about two years as larvae, burrow-



## **GAMEcooking Tips**

### **Quick and Easy Rabbit**

After one of my seminars at a sports show in Altoona, a young man shared this easy and delicious recipe with me. After trying it, I must admit he knew what he was talking about. I was sure the temptation to add some spices or other ingredients would be overwhelming, but the recipe stands. It's great exactly as given to me, and perfect after a hard day of small game hunting.

- 2 rabbits, cleaned and cut into pieces
- 1 large can sauerkraut

Place the rabbit pieces in a baking dish in a single layer. Top with the undrained sauerkraut. Cover and bake at 325° for 1 hour or until rabbit tests done.

Serves 4.

—FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY

ing in rubbish and soil, feeding on slugs, snails, and worms; they have a bite that paralyzes their prey. Some firefly larvae glow (as do the eggs of several species), and these are called "glowworms." Write Lorus and Margery Milne in *Insect Worlds*, "The fact that immature stages of these insects glow steadily suggests that the firefly glows because it cannot help it. The real accomplishment of the insect as an adult may be to turn off the display, to change a steady light into a variable or winking one."

The adult firefly's abdomen contains the lantern in which this miraculous light is produced. In 1885 the French physiologist Raphael Dubois removed the light organ from a West Indies fire-

fly, ground it up in water, and left it until the light went out of its own accord. He then removed a second firefly's light organ and ground it in boiling water for a short time, so that its light, too, was extinguished. When the two extracts were mixed, the light reappeared. Dubois deduced that two substances were needed to produce light, one of which was inactivated by heat. He called the substances luciferin and luciferase (after Lucifer, among whose devilish crafts was the bearing of light).

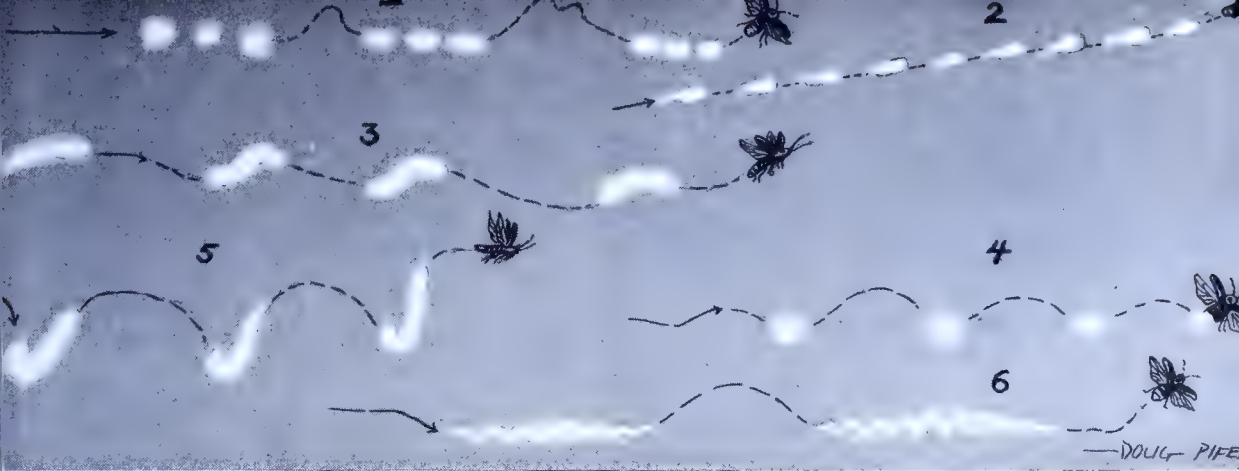
Firefly light is "cold light," similar to that produced by certain other insects, marine animals, and bacteria. Without going too deeply into the chemistry of bioluminescence (which, in fact, remains incompletely understood), the enzyme luciferase enables the pigment luciferin to act with oxygen and ATP (an energy storage compound) to yield light; the process is under control of the nervous system. Firefly light is quite efficient: the reaction releases more than 75 percent of its energy in the form of light, less than 25 percent as useless heat; in comparison, the incandescent bulb emits 10 percent light, 90 percent heat.

The flashes of adult fireflies—conducted in a variety of patterns, sequences, and colors—serve to get males and females of the same species together for mating.

The accompanying illustration, adapted from a drawing in *Life on a Little-known Planet* by Howard Ensign Evans, shows male patterns of six species. No. 1 flies two to four yards off the ground and gives three slow flashes in succession. No. 2 flies straighter and lower, his single flash increasing in intensity during emission. No. 3 makes a long flash while executing a curve; No. 4 flies a series of hops between which he hovers and gives a quick flash. No. 5 has a J-shaped signal; and No. 6 produces a long flash while shimmying from side to side.

The flying flashers are generally males. Most females, laden with eggs, are too heavy to fly; they crawl into bushes, out onto twigs and blades of





grass, and respond to the males' flashing patterns with flashes of their own.

The females have it all over the males. The males must expose themselves to predation by bats, whippoorwills, children with mayonnaise jars, toads. (If a toad swallows enough fireflies, the insects may shine brightly enough to make the toad's stomach luminesce.) In many cases, male flashers outnumber females 50 to 1. Biologist James Lloyd of the University of Florida, a leading firefly researcher, estimates that it takes a male firefly in a Florida field an average of seven days to find a mate, while a female can mate and return to the safety of her burrow in six minutes flat.

The scenario goes something like this: The male wanders about flashing his species' message. ("Here I am, a sexually mature male of species X that is ready to mate. Over.") His eyes scan unblinkingly, forward and downward and to the sides, looking for a response. The receptive female replies, the correct number of milliseconds later, with her own unique light signal. The male flies toward his prospective mate and flashes again. She answers. He flies closer and signals again. She replies. And so on, until a tryst takes place.

Biologist Lloyd, while studying fireflies of genus *Photinus*, found he could locate females of a given species by walking about in fields imitating the male signal with a flashlight. On one occasion, however, the female that signaled turned out to be not a *Photinus* but a larger *Photuris*—responding in perfect sequence to a male with whom

she could not possibly mate. Lloyd watched this femme fatale for half an hour and saw her wink at twelve passing *Photinus* males, in each case using the code for the particular species of male passing by. All of the males were at least somewhat attracted. Finally a male landed near her, and, after an exchange of signals, ceased to light up again. Lloyd flicked on his flashlight. The *Photuris* female was eating the *Photinus* male.

### Uncomfortable Position

Biologists have since documented widespread predation by North American female fireflies. Certain hunting females can recognize the male flash—and give the appropriate female response—of at least five different species. Hunted males are in the uncomfortable position of having to be both forward and cautious at the same time: if they fly too quickly to a flashing female, they may get eaten; if they dawdle, a rival male may reach a receptive, correct-species female first.

Some males apparently combat the problem by flying at twilight, when there is enough light to see the larger size and hunting posture of a *Photuris* female. Other males have evolved an extra long flash signal: a predatory female may mistake the first part of this long signal for the complete code of another hunted species, respond prematurely, and give herself away.

Courtship is not such a grim business on the other side of the Pacific. In parts of Asia, thousands of male fireflies of the

## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

same species will gather in a single tree, or in several neighboring trees, and flash for hours, yielding a glow that can be seen for half a mile. Hugh M. Smith, an American studying the fish of Thailand in the 1930s, wrote: "Imagine a

tree 35 to 40 feet high thickly covered with small ovate leaves, apparently with a firefly on every leaf and all the fireflies flashing in perfect unison at the rate of about three times in two seconds, the tree being in complete darkness between the flashes. . . . Imagine a tenth of a mile of river front with an unbroken line of trees with fireflies on every leaf flashing in unison."

The brilliant synchronous flashing serves as a beacon to draw females from the surrounding jungle; sort of an insect discotheque. Probably the dense, tangled growth of a Thai rainforest is not an easy place for individual fireflies to flit around flashing messages to one another.

I doubt I will ever boat down the Chao Phraya River and witness thousands of Thai fireflies lighting up the trees. A firefly-spangled pasture on a summer Pennsylvania night is spectacular enough, full of nostalgia, beauty, and intrigue.



**THIS YEAR'S** Keystone Deer Classic is being held at the Harrisburg Farm Show complex from Friday, August 25 through Sunday, August 27. Among the show's highlights are ten big game trophy contests; approximately 100 displays and exhibits by taxidermists, outfitters and manufacturers; and a line up of seminars featuring Kelly Cooper, Tom Fegely, Bob Kirschner and a host of other nationally recognized hunting experts. Show hours are from 6 p.m. to 10 p.m. on Friday, 10 a.m. to 9 p.m. on Saturday, and from 9 a.m. to 5 p.m. on Sunday.



Proof from the past . . .

# Stone Age Archery

By Keith C. Schuyler

I have long wondered about the earliest evidence of archery. Many, while considering the evolution of mankind, have equated use of the bow and arrow with the art of kindling fire and the invention of the wheel. Writings I have studied seem to base the first use of the bow on Spanish cave paintings, but information that has come my way disputes that premise.

The Encyclopedia Britannica, for example, mentions, "Its invention, 30 or more millennia ago, . . ." Dr. Robert P. Elmer, in his book, *ARCHERY*, published in 1926, ties its origins, "as far as we can tell," to the Aurignacian race "who lived at least 25,000 years ago." These were people of the Paleolithic, or second period of the Stone Age.

Both sources, however, then refer to the primitive paintings in the caves of Ceuva de los Caballos, near Albocacer, Castellon, in eastern Spain as their authority. The only problem with this is that the pictures depicting archers in action were drawn about 10,000 years ago, during the Mesolithic Period. And they are not cave paintings. I contacted Douglas Mazonowicz, perhaps the world's leading authority on the art of Caballos, as well as many other prehistoric paintings throughout eastern Spain, southern France, north Africa and the United States.

In his excellent book, *VOICES FROM THE STONE AGE* (\$17.95), he writes, "It is not easy to establish with certainty the age of Spanish rock art, but the ex-



**FIGURE 1. Four different styles of bows are evident in this stone age art, but there appears to be no arrowheads, and arrow penetration seems light, indicating archery was still fairly primitive.**

treme dates are likely to be between 8000 and 2000 B.C."

My interest in trying to trace the beginnings of archery was revived by an article in the March/April issue of *International Wildlife* in which Mazonowicz's reproductions of Spanish cave art and stone art were shown depicting men using the bow for hunting. Personal inquiries led me to the English-born Mazonowicz at the Gallery of Prehistoric Art, 25-60, 49th Street, Astoria, New York 11103. I purchased a copy of his book, and received permission to copy his reproductions of not cave, but stone shelter art, which are in mere cavities in the cliff face that are open to climatic change.

Although we can pin down the ap-



**FIGURE 2, above, the archer is dressed in full regalia and is carrying spare arrows in his bow hand. Also note the sickle shape arrowhead. Figure 3, below, shows a dead animal, its tracks, and the three bowmen who dropped it. Again, a more advanced bow is in the hands of what appears to be the group leader.**



proximate time bows and arrows appeared in rock art, we can only guess at how long these instruments existed before they were portrayed. Cave art, which is older, was, for the most part, limited to illustrations of lone people and animals.

It's my personal belief that archery existed for some time before stone age artists provided its reproduction in action scenes. I support Dr. Elmer and Encyclopedia Britannica to some extent, but for different reasoning—the somewhat advanced development of bows, and to some extent, arrows, in the hunting scenes. Mazonowicz is of the

opinion that the use of spears closely predated ancient art work. There was undoubtedly some overlap in the use of spears and bows and arrows, perhaps many centuries, as the latter evolved into a more efficient weapon.

Most explicit in the reproductions shown here (Figure 1) is the vertical scene (also used by Elmer from another source) showing four archers facing ten deer, seven of which appear to have been hit by arrows. Characteristically, two bucks, one a magnificent animal, are to the rear of the does and fawns. Noteworthy here is that each of the four archers is carrying a different style of bow.

### Below the Tip

The top hunter has a bow which has a string nocked some inches below the tip on each end. Whether this was to increase the power of a bow that had become weakened through use or age, or was an original configuration, is open to conjecture. But similar bows are shown in other paintings. The second archer down appears to be using a more typical bow. In sequence, the third archer shoots what seems to be a bow of limited efficiency, with abruptly swept back limbs. The bottom archer has a bow with reflex-deflex limbs, (they curve away from the handle and then return to the string), which is a most unusual advancement for the time. Figures of the men are quite primitively reproduced, although the animals might pass as fair art even today.

In this and other scenes, efficacy of the bows and arrows is certainly in doubt, although they eventually did the job. However, the arrow shafts, which show no fletching, appear to be rather flimsy and penetration seems to be marginal. Further, there is scant evidence of other than a sharp point on the ends of





**DOUGLAS MAZONOWICZ**, a leading authority on prehistoric art, reproduced the illustrations shown here from stone shelter art made about 10,000 years ago. Of course, for what length of time bows were used before being depicted in art is still unknown.

some shafts, except that two bent ones between the two bottom most archers appear to have rudimentary broadheads.

An exaggerated depiction (Figure 2) of an archer facing a charging ibex, which in real life stands about three feet at the shoulders, provides insights into the time. The hunter is shooting a bow with unusual limbs, and his arrow has what might be considered a sickle-shape head. Further, he carries spare arrows in his bow hand. Additional spares appear to be behind him. He also is wearing leg protection against rough stones and prickly bushes where these goats might be expected. The animal may be charging or it may have been driven to the shooter.

It is noteworthy that an archer, in one of the many reproductions not shown, is in full regalia with his bow and arrows, and that at least four shafts are fitted with broadheads. It might be assumed, however, that they are made of flint or stone because the first workable metal—copper—was not extracted from its ores until about 3500 B.C.

A picture (Figure 3) of a dead deer, so indicated because of its inverted position, shows tracks of the animal and the three archers who did it in. Only two



bowmen are wearing leg protection. But, again, we see the reflex-deflex limbs in the hands of the leader, who may be a person of some importance. Whether he assisted in the kill, or is just being given a close look, cannot be determined. This scene is taken from a larger painting which is part of a boar hunt to be discussed.

### Other Illustrations

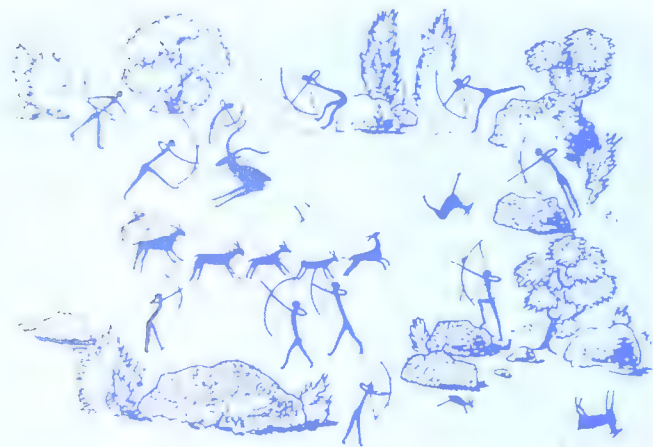
There are other illustrations in which the leader is wearing, perhaps, a symbolic headdress or helmet. In one, each of the four behind him are carrying what might be considered conventional bows of the time, while he is carrying a bow with slightly reflexed limbs. Interestingly, an almost identical scene is shown in paintings in the Sahara of Algiers and is faithfully reproduced by

**IN THE BOAR hunting scene below, Figure 4, the archers' legs are emphasized in exaggerated running positions. Here again, some sort of protective leggings is indicated.**





**THE HUNTERS** seem to have become the hunted in Figure 5, above, as five arrows weren't enough to stop the charging bull. In Figure 6, below, Mazonowicz added natural props for realism in this piece of stone art depicting 12 hunters surrounding a herd of goats.



Mazonowicz in one of his many paintings. He believes that these warriors are messengers, and he found comparable rock paintings among American Indians.

In the boar hunting scene (Figure 4), archers appear to be riding kayaks, as

legs are emphasized in exaggerated running positions. Here again, some sort of protective leggings are indicated. The archer at upper left is carrying extra arrows in his bow hand, a practice common yet today among African aborigines. It seems that overwhelming arrow power is more important than precise shooting, and a quiver would slow down the shooting process.

Hazards of bow hunting (Figure 5) are shown in the flight of an archer from a bull that has at least five arrows or spears in him. At this point the projectiles seem insufficient to discourage the bull from inflicting mayhem on one of his tormentors. Help is on the way, from two other archers running full tilt.

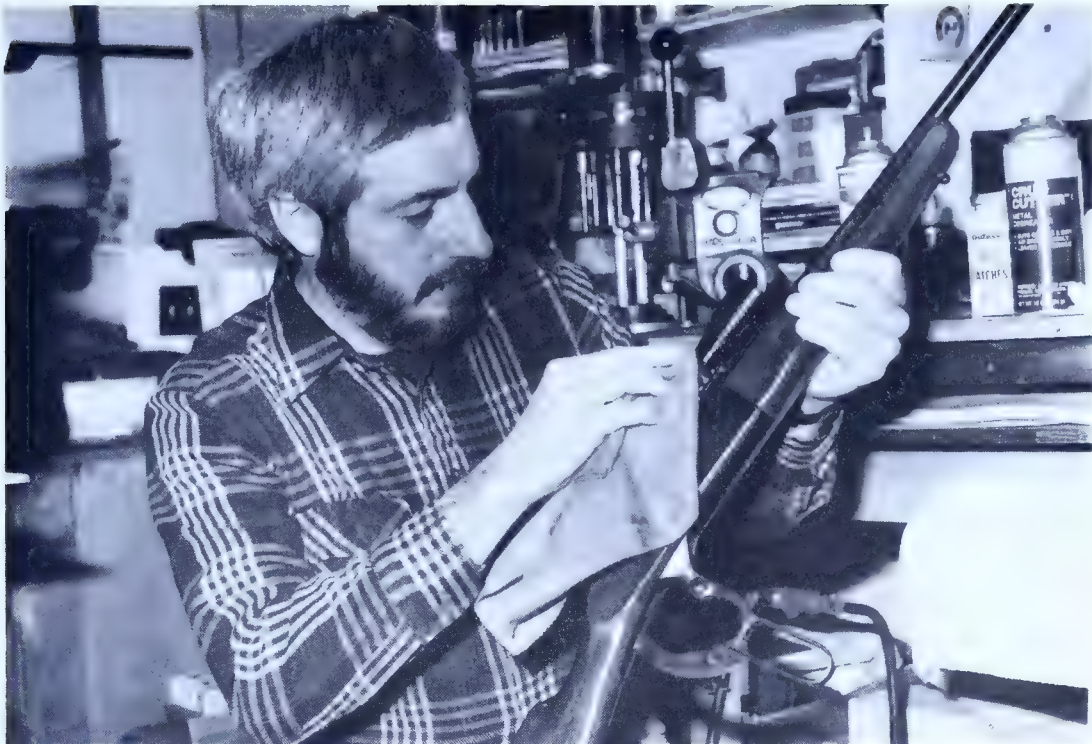
Reconstruction of a hunting scene (Figure 6) by Mazonowicz takes painter's privilege by adding natural props for realism. No fewer than 12 hunters surround an ibex and a herd of goats, two of which have been killed. In the actual rock paintings, where natural formations were used to provide a three-dimensional effect, no scenery was painted by the primitive artists.

Copies of reproductions from Mazonowicz's book have been printed with extra contrast here for easier viewing. Those with no natural background of the rock formations on which they were originally painted, were lifted from his own work by the author for special emphasis.

These views of primitive archery represent but a small portion of Douglas Mazonowicz's 211-page treatment of cave and rock shelter paintings that he has preserved for all time. Weather, vandals and visitors have already damaged some of the priceless works that were, for the most part, hidden from human view until 1866, when a dog led the way to their initial discovery.

And the history of archery was updated—through art.





**A THOROUGH cleaning will keep your hunting arm in good working condition and eliminate many problems in the field. Here Darrel Lewis wipes off his Savage 99 chambered for the 358.**

## Pre-Season Ritual

**By Don Lewis**

**Photos by Helen Lewis**

**“MY RIFLE JAMMED** on me this morning, costing me a chance at a second shot at a buck. Could you take a look at it for me?”

I just couldn't refuse the fellow standing in front of me with a 30-30 Model 94 Winchester in his hands.

“I'm behind with a gun article, but I'll check over your outfit,” I told him. “Are you sure your rifle didn't freeze this morning? The temperature was below zero,” I kidded.

“You're right about it being cold, but the rifle worked easily when I loaded it soon after leaving the car. About an hour later, I got a shot at a trotting buck, but I had to snap the hammer twice. I apparently overshot. The buck stopped and looked around for a half minute. I simply couldn't get the lever to work. I can't understand it because I put plenty of grease in the action last night.”

I worked the lever several times and dropped the hammer without any problems. I then opened my shooting window, loaded two rounds into the magazine tube, and shot at the 100-yard target.

“Everything seems fine now, but what did you mean about ‘putting plenty of grease in the action?’”

“Just what I said. I lubricated it for life.”

### **Absolutely Right**

He was absolutely right. I disassembled the rifle and was flabbergasted to find the entire action packed with heavy grease, similar to the type used on wheel bearings. I didn't ask what prompted him to pack the action with grease. After I washed off the parts and blew out the action with a cleaning solution and compressed air the Model 94



ROD or bore guides protect the barrel, particularly the throat and muzzle, from being damaged by the cleaning rod. The piece on the left fits in the action of bolt gun, the other piece is a muzzle guide.

was as good as new. I suggested that from that point on the hunter sticks with just a thin coating of oil or even leave the internal parts dry during the hunting season.

As long as I can remember, when the first frosts of fall swept over our little village, the pre-season ritual of "gun cleaning" became a mandatory event. The standard question in the country store was, "Do you have your shotgun oiled?" I'm not sure anyone asked if the shotgun was cleaned, just oiled—and oiled they were. Oils of that era did not come in aerosol spray cans, and most were as thick as molasses. The same oils that were used on horse-drawn mowing machines and barn door hinges were used in guns. One can served all purposes.

### Every Cent

I'm not saying that there weren't some very fine gun oils in the early 1930s. In Stoeger's 1931/32 *ARMS and AMMUNITION*, Hoppe's Gun Cleaning Kit, containing Hoppe's No. 9 bore solvent, lubricating oil and gun grease, sold for a whopping \$1. There were others, too, and many hunters took full advantage of the products. A lot of us younger hunters, however, spent every cent we had on shotgun shells, not bore cleaners and gun oil. The stuff in the wagon shed sufficed.

After I opened a gunshop in the 1950s, I learned how much grease and oil had been used. More than one fine double barrel's stock had rotted from excess oiling. Maybe I shouldn't use the

term "rotted." Actually, the generous dosages of oil soaked into the wood and softened it. In time, screw threads in the wood deteriorated. When the wood is so soft, it has no gripping surface.

Today, the market is flooded with gun cleaning products, particularly bore cleaners. There are all types of claims. As a gunwriter I get many samples and brochures extolling the virtues of this or that gun grease or bore cleaner. There's no question in my mind that all gun cleaning products have improved since I purchased my first shotgun over 50 years ago. And with the improved cleaning products, cleaning methods have changed over the years, too.

Cleaning a rifle in my younger days meant swabbing the bore with an abrasive type compound. I still have several old paste-type bore cleaners that are so impregnated with abrasive grit they could be used for grinding valves in a car engine. Some of the older solutions have to be handled with care or the barrel will rust and pit. In that time period, most barrel fouling was lead and powder residue. When velocities hit 3000 fps and faster, however, a new demon raised its ugly head. Gilded metal is the culprit, and gilded metal is nothing more than the copper plating stripped off the bullet jacket when it passes through the barrel. Minute as it may be, it builds layer upon layer from the very first shot as the bullets pass through the bore. The burned powder residue also is ironed into the gilded metal.

In the old days a bore was considered clean when a patch came out clean. That's not quite true now. Today, a clean







patch means that all the burned powder residue and solvents have been removed; it doesn't tell us a thing about jacket fouling. A quick glance through the bore may give the impression that all is clean, but gilded metal is tough to see without a bore scope.

Buildup is greater in the throat area just ahead of the chamber. Furthermore, the more fouling that builds in this area, the more gilded metal will be stripped from the bullets. Such buildup in the throat area subjects bullets to a lot of stress.

Nearly every hunter has heard of "firing a fouling shot." If the buildup of gilded metal in the bore is bad for accuracy, why would anyone want to fire a shot or two to foul the bore. Strange as it may seem, a smattering of bore fouling doesn't seem to have any appreciable effect on accuracy. The problem begins when the layers of gilded metal and burned powder residue start to thicken.

A new rifle's bore may look smooth as silk to the naked eye, but it's far from that. It's almost impossible to completely lap out the circular tool marks left in the bore from when the barrel was drilled. These strip off jacket metal.



**USING JOHN DEWEY** cleaning tools, Darrel fits the tapered muzzle bushing in barrel, left, and then inserts the rod through the bushing, above. On pump and lever action rifles it's usually not feasible to run a rod from the chamber to the muzzle.

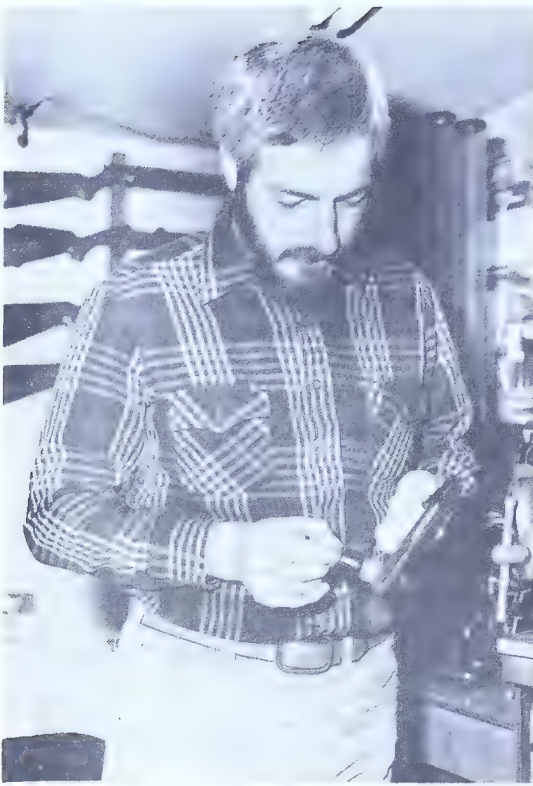
Also, in the process of making steel, not all impurities are removed. Technically, these are called inclusions. They strip off jacket metal as the bullet passes over them.

No matter how we look at it, high velocity jacketed bullets leave a mixture of copper and burned powder residue smeared in the bore. Believe it or not, bits of fouling from a phosphor bronze brush may be left in the bore as well. All these pack layer on layer if the bore isn't frequently cleaned properly. Remember, it's always wise to wipe the bore clean with several dry patches after brushing it.

### Two Main Wear Spots

The two main wear spots in a barrel are the throat area and the muzzle. I've already mentioned that it's the throat area where copper gilded metal from the jackets accumulates. The muzzle is normally worn from improper cleaning procedures. A cleaning rod that rubs against the lands or binds in the muzzle will certainly take a deadly toll on accuracy. This is where rod guides become important.

One type of rod guide is strictly for bolt action rifles. Basically, it's a round metal tube approximately seven inches



**IT'S IMPORTANT to keep more than just the barrel of a firearm clean. A brush soaked with good gun oil is just right for cleaning small parts such as this bolt from Darrel's Ruger 77/22.**

long with a rod-size hole through it. The bolt is removed and the guide inserted into the action. The front of the guide is beveled to fit into the front of the chamber. With the rifle in a padded vise, the rod with a brush or patch is pushed through the guide into the chamber and through the bore. If care is used and the cleaning rod is pushed evenly, there is little chance of the rod buckling and rubbing against the bore itself.

It's also wise not to pull a patch back through the muzzle. I simply push the patch through the barrel and discard it when it comes out the bore. Attempting to pull the patch back into the muzzle can have severe consequences, from chipping the tips of the lands to elongating the muzzle. There are several rods that use circular felts that fit over a thin spear on the end of the rod. When the rod is pulled back through the bore, the felt often slides off the spear and then gets stuck in the barrel. It's better to use a few more patches than to take chances and possibly damage the muzzle.

On pump and lever action rifles, it's not normally feasible to run a rod from the chamber to the muzzle. For clean-

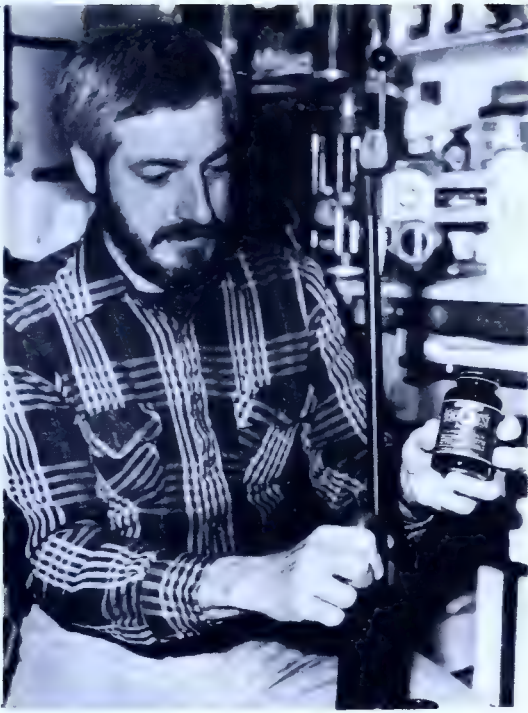
ing these I use a John Dewey steel rod that has a sliding beveled bushing. Insert the bevel of the bushing into the muzzle and push the rod and patch through the bushing. There is no danger of damaging the crown or causing wear on the tips of the lands.

Another important factor to remember is that cleaning a rifle bore is not a feat of strength. Never force or pound on a rod. Be sure to always use brushes and patches that are the proper size for the bore being cleaned. For the most part today, it's the solvent that does the cleaning. Back in the days of the abrasive cleaners, it took a lot of elbow grease to clean a bore. It was a matter of wearing down the fouling until it disappeared. However, at the same time, a certain amount of bore metal was being removed along with the fouling.

The day of the scrub and rub method is over. Solvents such as Hoppe's No. 9 Benchrest, RTI's Accurbore and Shooter's Choice have taken the drudgery out of bore cleaning. Those solvents attack the copper gilded metal and other ingredients in bore fouling, including plastic residue (mostly in shotguns), without damaging the bore metal itself or causing the bore to rust later. Don't be lulled into thinking that any type of strong liquid cleaner, like those used on car engines, is good for a rifle bore. If this were true, the firms mentioned wouldn't have spent years developing solvents specifically for removing all types of bore fouling without damaging the bore proper. There's more to cleaning than just getting the fouling out.

The shotgun's worst enemy is plastic wad fouling. Naturally, there is some buildup of lead in a shotgun bore, but the real demon comes from the wad. I've seen shotgun barrels that were damaged from plastic build up, and I know of one case where a fine over/under's barrels separated at the rib because of because plastic build up. Each





**A VARIETY of gun cleaning solvents have been developed specifically for removing the gilded copper, plastic fouling, lead and other residue without damaging the bore. Few barrels are shot out; most often they die from neglect.**

of the products mentioned are supposed to dissolve plastic residue.

For years it was believed that 22 rim-fire rifle bores never had to be cleaned. And truth is, many of them never were. How wrong that philosophy is. While the little rimfire is much slower in velocity, it nevertheless leaves a good smear of lead, which builds layer upon layer. I once brought a Model 64 Anschutz back to life simply by soaking the barrel with Shooter's Choice overnight and then brushing it for a few minutes. The patches were loaded with crud.

I mentioned before that a clean patch isn't a guarantee of a clean bore. Allow a

good bore solvent an hour or so to work, especially if the bore hasn't been cleaned for a long time, and then run a patch through it. Unless I miss my guess, the patch will be bluish green. That's gilded copper you're seeing. Surprisingly, you may get the same color of patch out of a bore you think is clean.

Few barrels are shot out. Most often they die from neglect, gilded metal buildup and improper cleaning procedures. Many times a proper cleaning will restore accuracy in a barrel that is thought to be shot out. It's a new ball game today. Clean your rifle bore often, twice as often if you're a varmint hunter.

## Cover Painting by Tom Duran

Northern harriers, often referred to as marsh hawks, are slim raptors with long wings and tails. Males are light gray with black wing tips; females are brown. Both have conspicuous white rump patches. Harriers are typically found in marshes and agricultural fields, where they may be seen cruising low over the ground in search of small mammals and other prey. Not common in Pennsylvania, harriers are known to nest in the northwest, northeast and southeast corners of the state, but they may be seen in appropriate habitat throughout Pennsylvania, particularly during the spring and fall migrations. Like all too many other wild animals, northern harriers suffer from the loss and pollution of the wetland habitats they need for nesting.

# *In the wind*

bob mitchell



The U.S. Forest Service has launched a new program to improve the quality of turkey habitat on national forests by 65 percent. As reported by the National Association of Conservation Districts, the Forest Service, cooperating with the National Wild Turkey Federation and state wildlife agencies, already has more than 50 projects planned in 39 states.

**For poaching and selling deer, a North Carolina man was ordered to pay \$2000 in fines, \$279 in deer replacement costs, a \$100 community service fee, \$540 probation fee and \$120 in court costs. Furthermore, he lost his hunting privileges for life and has to perform 60 hours of community service.**

Two years into the captive breeding program for black-footed ferrets, specialists noted that some of the males had been coming into breeding condition well before any of the females. So as not to lose the genetic diversity offered by those males, researchers this year artificially increased the daylength where some of the females are kept, and succeeded into bringing them into breeding condition six weeks early. To further increase productivity, an aggressive female that had been unreceptive to males was artificially inseminated. In 1987, the first year of the program to restore the endangered species, two litters totalling seven kits were produced; last year 13 litters totalling 34 kits were produced. All of the black-footed ferrets known to exist are in captivity, either in Wyoming, Nebraska or Virginia.

During the signup last February, more than 3.2 million acres were enrolled in the Conservation Reserve Program, bringing to more than 31 million acres the total enrolled since the program began in 1985. According to the Wildlife Management Institute, included in the total for the February signup are up to 300,000 acres of restorable wetlands, which just became eligible for this federal conservation program.

**Hunters in Maine enjoyed a record bear kill last year. A total of 2651 bears were taken during the three-month season. Excellent hunting weather and a heavy beech crop, which kept the bears from denning, attributed to the high harvest.**

Antelope populations in Nebraska have dropped from about 10,000 in the mid-70s to about 3000 animals today. Biologists with the state Game and Parks Commission attribute the decline primarily to coyote predation on fawns. To reduce this predation the state implemented a control program designed to reduce the number of coyotes on antelope fawning grounds. Based on studies from other states, the control was implemented at two specific times, three weeks and then one week before antelope fawning.

After finding more than three dozen dead moose within a four-county area in northwestern Minnesota, officials first suspected the brainworm parasite to be the cause. Autopsies, however, disclosed that the animals died from starvation and hypothermia because of tick infestations. Thousands—and possibly hundreds of thousands—of moose ticks may be found on an animal, and in trying to remove them, the moose scrape off so much hair that they are unable to survive the winter.

## **ANSWERS:**

Black Duck, Wigeon, Northern Pintail, Northern Shoveler, Ring-Necked Duck, Lesser Scaup, Bufflehead, Common Goldeneye

**FINAL ANSWER: Wetlands**





*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in *GAME NEWS*. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover book costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797.



## **Voluntary Waterfowl Stamp No. 7**

Pennsylvania's 1989 waterfowl management stamp, a pair of hooded mergansers by Orange, Virginia, artist Ronald Louque is the seventh "duck" stamp offered by the Game Commission. Funds derived from stamp and print sales are used for wetland acquisition, habitat development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. For a savings, the cost for five or more ten-stamp sheets, in any combination of years, is \$40 per sheet. The 1987 stamps will be available through December 31, 1989, at which time all remaining supplies will be destroyed.

Stamps are available at the Game Commission Harrisburg headquarters, region offices, Pymatuning and Middle Creek Wildlife Management areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints of this design are available from art dealers and galleries nationwide.

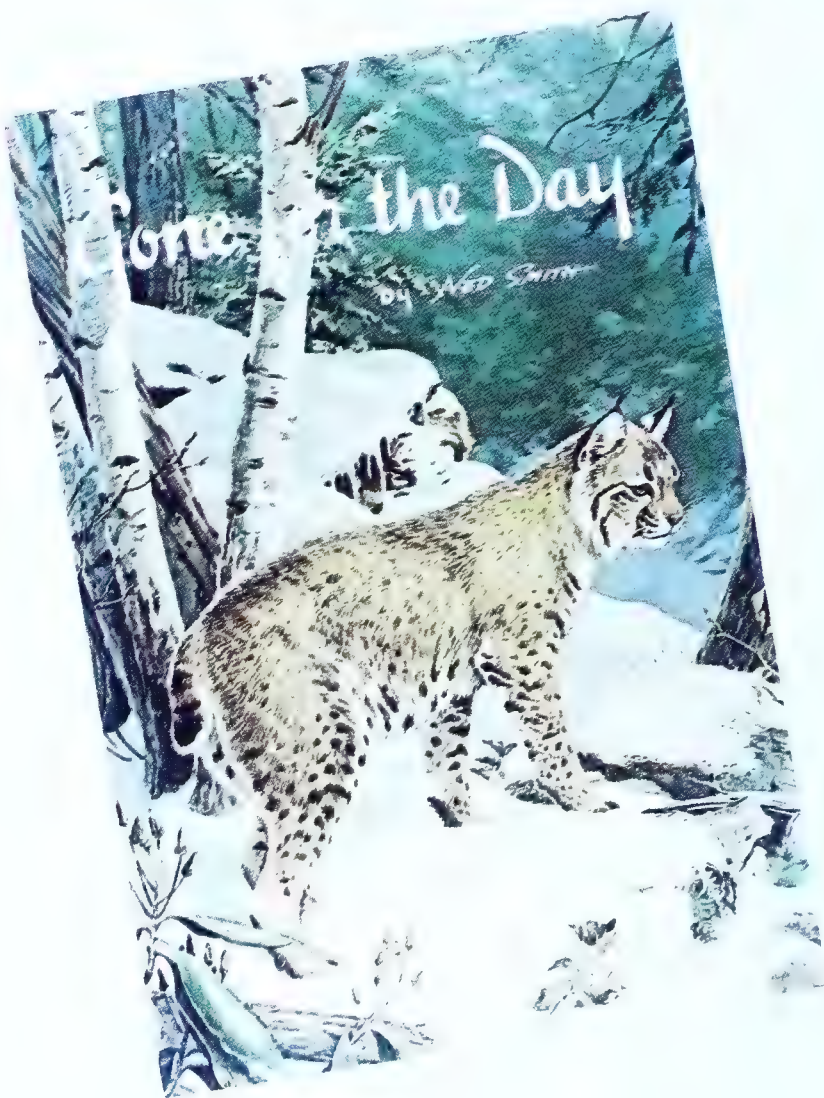


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# Commonwealth of Pennsylvania



## Governor's Office

### PROCLAMATION

#### PENNSYLVANIA HUNTING AND FISHING DAY September 23, 1989

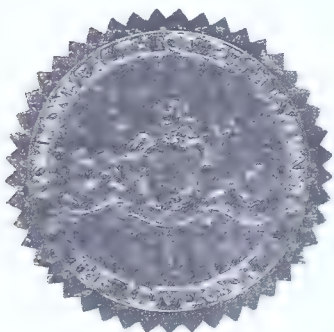
*Pennsylvania's natural resources are world famous. From the depths of our green forests to the crystal blue of our lakes, Pennsylvania's wildlife is abundant and the scenery spectacular.*

*Three centuries ago our Commonwealth's founder, William Penn, wrote of a "good and fruitful land" where "fowl, fish and wild deer" were plentiful and "the air is sweet and clear, the heavens serene."*

*Today, we cherish this rich environmental heritage. Our sportsmen and women are committed to protecting our abundance of game and fish and maintaining an ecological balance in our modern society.*

*Nearly three million Pennsylvanians are licensed to hunt and fish in our Commonwealth. These individuals play a vital role in helping to maintain our rich and beautiful environment. Through organizations such as the Pennsylvania Federation of Sportsmen's Clubs, these people exemplify the virtues of conservation and preservation. Together, they work to ensure that Pennsylvania's natural resources remain intact for the generations to come.*

*Therefore, I, Robert P. Casey, Governor of the Commonwealth of Pennsylvania, do hereby proclaim September 23, 1989, as PENNSYLVANIA HUNTING AND FISHING DAY. I urge all citizens to join the Pennsylvania Federation of Sportsmen's Clubs in their efforts to preserve and protect our environment.*



*GIVEN under my hand and the Seal of the Governor, at the City of Harrisburg, this twelfth day of July in the year of our Lord one thousand nine hundred and eighty-nine, and of the Commonwealth the two hundred and fourteenth.*

*Robert P. Casey*  
Robert P. Casey  
Governor





**PREBAITING** is old hat. The practice involves nothing more than going out before season and placing bait at set locations—without traps, of course—so the critters are sure to be visiting when it comes time to string steel.

# Prebaiting

By Joe Kosack

**P**REBAITING is a trapline practice that many furtakers scratch their heads and wonder about. To some it is a way to get a jump on competitors. Others consider it a waste of time and effort. Some know nothing of the concept.

Although it may be news to some trappers, prebaiting is old hat. The practice involves nothing more than going out before season and placing bait at set locations—without traps, of course—so the critters are sure to be visiting when it comes time to string steel. Supposedly, prebaiting will give you an edge on the competition, reduce your trapping time in an area, and decrease suspicions in the furbearers approaching your sets. However, I am not too sure about any of those conclusions, especially the reducing suspicion rationale. But that doesn't

mean the method doesn't work. I have talked with many trappers who swear by prebaiting; they say it provides a fast way to corral an area's surplus critters. Because these trappers are spending less time in their prebaited areas during the season, they can roll over more territory and accumulate a larger quantity of fur.

## Worth It?

Still, can placing bait early guarantee fur, and does all the driving or walking, not to mention money spent on gas or bait, pay off?

Considering the opportunistic nature of furbearers, such as the raccoon and red and gray foxes, it seems hard to believe that these animals would shuffle past another trapper's tempting offers to reach your prebaited sets once the sea-



son begins. After all, these creatures are looking for easy food. They don't really care where it comes from—a road kill, a corn field, a trapper's set—just that they prevail in their quest.

When a raccoon pops out of its den at dusk, it doesn't hit the ground and wander about looking for food. It heads out determined on the path of least resistance to reach an overflowing food source. The animal is not thinking about filling its belly at one of your prebaited sets because it has already learned through raiding the location that such quantities of food don't exist there. But it may consider stopping over to consume that mouthful of food at your set on its way to a corn field, grapevine thicket or other primary food source.

### Defeating Your Strategy

With that thought in mind, prebaiting appears somewhat attractive to trappers because the earlier offerings could spark an urge in the critter to use a specific travelway that brings it close to the prebaited location. However, who's to say another furtaker won't plant a few sets on the travelway between your prebaited sets and the coon's den, defeating your strategy?

Even if you place your prebaited sets near raccoon dens, though, there are no assurances. For instance, the raccoons may show a nightly commitment to raiding your prebaited sets, but there is no guarantee on how long they will remain in this den or that one. Raccoons use a variety of dens. They are forest nomads that invariably move their den sites to reduce the distance they must travel to

reach the feeding areas where they are stuffing themselves. Although some raccoons maintain a primary denning site because it's located near a multitude of food sources, most don't. So trying to determine which dens the raccoons will be using at the outset of season could very well be a lesson in futility. That's why most veteran trappers set travelways and feeding areas, places where prebaiting is unnecessary because the critters are already in the habit of coming by or dropping in.

Prebaiting is also popular among fox trappers. Some claim the prebaiting reduces a fox's fear of approaching a set because each time it raids the set and gets away with it, the canine becomes less cautious about nearing the set again. Other trappers, however, claim that a fox loses interest in a prebaited set after it has stolen from it once or twice. Let's take a look at those viewpoints.

It would appear to me—I don't prebait for foxes—that if a fox works a prebaited set shortly before season, its visit would be documented in the form of a squirt of urine or a dropping, not to mention the scent secreted from glands in its paw pads. This would surely be a welcome attractant at any set. After all, foxes are noseey creatures when it comes to checking out calling cards left by other canines.

Still, the moment a fox detects fresh human scent and the smell of a recently planted trap at the set, which it inevitably will if the animal is more than a year old or has been nipped by a trap earlier in life, its guard will go up. Whether the foxy odor at the set will calm the incoming fox's uneasiness toward the other foreign smells is a matter of individuality and timing. If it's December, the mating urge or an empty belly may compel the fox to work the set. However, if the critter has been pinched by a trap before and it detects the odors of human and metal, the fox probably won't come



**WHEN A raccoon pops out of its den at dusk, it doesn't hit the ground and wander about looking for food. It heads out on the path of least resistance to reach an overflowing food source.**



near the set or it will attempt to uncover your trap.

In all, I believe prebaiting may give a fox trapper a slight advantage over his competition, based on the fresh smells the set will accumulate, but I highly doubt it reduces much fear in the approaching animal. After all, a fox represents a wild animal at its finest. Sure, it's an opportunist, but it is also a wary, intelligent and extremely cautious creature, and I don't believe many foxes will compromise these traits or exhibit a tinge of domesticity over a few chunks of freebies.

One aspect of prebaiting that may not appeal to many trappers is that there is nothing you can do if someone sets your locations before you do on opening day. It's legal, although unethical, and it does happen. Ditto for the trapper who may set traps in the general vicinity of your prebaited sets on the opener; it's a toss-up as to who will take the majority of the furbearers.

As a matter of fact, the furtaker who sets traps near your prebaited locations may have an advantage over you. After all, the incoming furbearer knows where your prebaited set is and what to expect from it. But when it uncovers a new, appealing smell on the way to your prebaited location, I believe curiosity will compel the critter to investigate the odor emanating from the competitor's set. Of course, this is all relative to the direction the critter is traveling and the baits used, but it's fuel for consideration.

Based on what I have mentioned so far, it may appear that I am dead set against prebaiting. I'm not. I do some prebaiting every season. But my early offerings are simply probes to determine what comprises an area's furbearer population before the outset of season. Let me explain.

Each year I look for more trapping territory, something I never seem to have enough of. When I find an attractive location, I secure permission to trap if necessary, then I scout for sign.

In my neck of Penn's Woods, I occasionally encounter areas where there

are no obvious indicators of furbearer inhabitation or movement—tracks, scat, dens or signs of depredation—because the locations are high and dry, grassy, or are rocky streams without sandbars. So in order to determine whether the area is worth my time and effort I toss in a couple of prebaited sets to ascertain what is traveling through or living in the area.

The sets are nothing fancy and should be placed at high interest areas for furbearers. The intersection of paths, near a rotted stump or rock pile, at the mouth of a feeder stream, under a large stream-side pine or oak are prime areas to consider. If the location is along a deer trail or logging road, I use a dirt-hole set with a big area of sifted dirt to its front. Along a creek, I'll use pocket or cubby sets with mud-bottom doorsteps.

For bait, I usually use a chunk of fish or groundhog. But if these aren't available for some reason, I grab leftovers from the supper table, chicken or pork-chop bones or the fat I meticulously cut from all the meats placed on plates before me. Top choices, though, are fatty meats and fish.

After the prebaited sets are made, I normally wait five to seven days before checking them for signs of raiding. If something has not worked the location within a week, I usually spruce-up the set with a shot of lure, and check it again in a week or two, or before the next rain. Should the set be inactive for three weeks, I tend to write off the location and shift emphasis to another area. But I may come back during the season to check the location for signs of activity.

Except for getting a handle on an area's population of critters, and for substantiating hunches about furbearer travelways and feeding areas, I steer clear of prebaiting. It offers me no guarantees and I don't need the extra work nor expenses. But that doesn't mean the concept won't work for you. If you try prebaiting, and it works well, more power to you. As for me, I'll spend my time prospecting for fur mines before the season opens; that's an investment that rarely goes sour!





# STUCK!

By P J Bell

PEOPLE DIE this way, Dan Kleinfelter thought. This is exactly how they die, and you read about it in the paper and wonder how such a thing could happen. This is how.

"I'm too young," he said aloud, wanting to hear a voice. "Too young and too strong."

That part was true. He was in good shape physically—he lifted weights, he jogged—and he was only 27. But now he was trapped.

He stretched his arms overhead until the bones in his fingers seemed to push through the skin—stretched, stretched—trying to reach a branch above, then sank back exhausted.

"Too strong," he gasped. The words caught on his breath and he rested his sweating brow against the smooth gray bark of the tree. No one answered.

The day was clear and clean with the biting sparkle of frost. South Mountain bathed, lazy and content, in the bright October sunlight of the 1987 archery season. It was the kind of day that forces you to stop whatever you're doing and look to the sky, the type of autumn day that makes you whistle or sing for no apparent reason.

The night before had been cold and without cloud cover so that, at dawn, heavy frost stiffened grass and weeds. Dan had climbed to the ridge top in darkness, his breath shooting like steam from a kettle when he exhaled. It was cold but fine, the kind of morning that makes a hunter grateful to be alive, and he'd felt a primitive power in his strides. In the predawn gloom, he'd made out a good size beech tree in a small clearing up ahead. It had a base diameter of over two feet and the trunk divided four ways a short distance above the ground. It should make a fine stand, he thought.

Bow slung over his shoulder, Dan

hoisted himself into the tree and climbed some distance. It gave solid support. Each of the upper trunks was thick and strong, so there was a feeling of solidity. He had no fear that anything might break or that he might fall.

But he couldn't get comfortable. First he tried straddling one of the trunks, then he tried sitting sideways with both feet to one side. Neither position seemed right. There was no way he could get into a reasonable shooting position. He shoved himself erect and tried standing. That was no good either. Dan grumbled a little to himself, but he wasn't worried. It was only a bit past 6 o'clock. He had plenty of time to find another tree.

## No Footing

Standing with his left foot on a branch and grasping the tree, Dan lowered his right leg, letting his boot guide itself along the trunk. But he couldn't find any footing. He stretched as far as he could, knowing he was within a short distance of the place where the main trunk divided into the smaller ones, but his boot still swung in mid-air. He could slide that far, he thought. With his arms around the smaller trunk he'd been leaning against, he couldn't fall before his right boot made solid purchase. He worked his weight off of his left foot, stretched downward as far as he could, and let go.

For an instant he hung without need for balance. Then he slid very quickly. He wrapped his arms tight against the upper trunk, and when he did so his right foot somehow swung to the rear, away from the tree, and *whoosh*, he dropped a short distance and slammed to a stop, balanced on his bent right leg which was jammed into the angle between two of the smaller trunks where

the tree divided. He sat back on his right heel and took a few deep breaths. He hadn't expected that much of a drop.

His heartbeat calmed. Okay, he thought, now push off backwards and land on the left leg. Ready, go. He pushed. Nothing moved. Try again. In the space of ten minutes, Dan ran the emotional rapids: from the irritation that swells when you realize your last action was a silly thing to do to the worry swirling in from the edges right before panic surges and rushes you over the top to the abyss below.

He harnessed the adrenaline feeding the near-panic and began calling for help. Surely others were hunting these woods this morning.

No one answered.



Time passed. Dan's right lower leg, lodged beneath his total body weight, lost circulation within a half hour. His left leg hung free but useless, scarcely a foot above the ground. It might as well have been a mile, for he could not reach it to shove himself upward, and no limbs were within reach above.

Dan shrugged his bow free, dropped it, and once more tried pulling his

weight up off the leg. He couldn't. Soon he was screaming for help, stretching, shoving at the entrapping trunks, praying. He prayed to get free. He prayed for the circulation to come back in his leg, knowing what would happen if it didn't. By 9:30, his throat raw, he had grown quiet, turning all his energy to the struggle of breaking free. He pushed and pulled and tried to shimmy higher, scraping his free leg up and down along the trunk, searching for the slightest purchase, for leverage, for anything.

But he was wedged in too tight. No matter how he strained to reach the branches above, he couldn't. No amount of stretching would yield those last few inches, and each try made him weaker. Frantic, he tried again and again to spread the thick trunks that clamped his leg. They were too solid. Unyielding. Trunks that promise no fear of falling also mean no give or bend.

**NO MATTER** how he strained to reach the branches above, he couldn't. No amount of stretching would yield those last few inches, and each try made him weaker. Frantic, he tried again and again to spread the thick trunks that clamped his leg. They were too solid.

Time passed. Hours. He didn't know how many. Dan's major concern was no longer his leg, it was his life. Thoughts of sacrificing his leg for a chance at saving his life entered his mind. Then to break the bone? Would that help? It might, he thought. Somehow he hoisted his exhausted body up off the leg, hesitated a moment, then flung himself backward. May God and free fall do it, he thought irrationally as his body arced back and over and down.

Bones and joints cracked. Blood rushed to his head. Swinging. Dangling. Vertebrae resettled and aligned. His lower leg never budged. Dan hung upside down, gasping, head close to the ground but not touching. How could he be so close and yet so far from a hold in any direction? His head seemed to be growing, getting heavier. He knew he



couldn't hang there upside down for long. He'd pass out, he'd . . .

Five years of weight lifting develops muscle. Dan brought those hours in the gym to the front of his mind. Think of it as curl-ups, he told himself. Concentrate. Take a deep breath. Exhale. Muscles strained, creaked, burned. Somehow his torso rose from the vertical hang. Reaching out, he grasped the tree, hauled himself up into his earlier position. He could breathe. But he was still trapped.

The wind was cold. Some part of him realized that, and he crossed his arms over his chest and hugged himself. Beneath the hunting jacket, he was wet from the skin on out through the layers of clothing. He shivered. He was cold, wet, dehydrated by his hours of struggling. But he was no longer in panic. He felt calm now, detached, resigned to losing the leg. By now it didn't feel like a leg or any other part of a flesh and blood body. Weight is what it felt like. Dead weight. Numb. Like the sandbags he propped his rifle on at the range. If it weren't for the occasional hot piercing stings in the thigh, which seemed to come from long very thin needles, he would feel only numbness. And numbness felt like nothing at all, except that there was a heaviness about it.

Maybe some hunters would come out toward evening, part of his brain thought. Everything seemed distant, disconnected. He fought to concentrate, remain conscious. It would be so easy to let go, let everything fade out, go dark. But he couldn't do that. His mother or his brother Roy would notice when he didn't stop at home to change clothes for second shift. If they realized—when they realized—he hadn't come back, help would come. He looked to the sun. Almost time. Soon he would begin calling again. He would conserve strength by shouting at ten-minute intervals. Dan stretched once more for the overhead branch. It seemed, somehow, even farther from his reach. Time passed, probably another hour. He could tell by the shadows. He still intended to yell, but for some reason he didn't . . .



"Dan!"

He watched a gray squirrel run headlong down the trunk of a nearby beech. It was almost the same color as the tree.

"Dan! Yo, Daniel. Answer me!"

"Roy?" Dan sat bolt upright and shook his head to clear it. "Roy? Yes, I'm here, Roy, over here. Over here!"

Thank you. Thank you. Thank you, God.

"Over here," he called once more, and sagged against the tree.

Roy circled the beech, came back around to face Dan. "What are you doin' up there? You are just about as sorry a sight as I've ever seen."

### No Joke

"This is no joke, Roy. I've been here since dawn, and I'm numb. My legs, both of 'em, are gone. I can't feel a thing. Just get me down, Roy. Get me down."

"Okay, Dan, okay. It's going to be just fine. I'll get you down."

Dan could feel Roy moving beneath him. Then he was being raised, little by little. But not enough. Never enough to grab hold higher up. His lower leg still would not budge.

Roy realized it too. "Listen up, Dan. I'm going to get Harry. I won't be long. We'll bring rope and you'll be down in no time. I promise. Just a little while longer, Dan."

Dan nodded and clutched the tree that held him. His knuckles showed white.

"Dan?"

"Okay, Roy. Get going." He didn't say hurry back.

Time passed. Outside his comprehension. He was in a world where noth-

## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

ing penetrated. Then Roy and Harry Kresge were back with an ATV, heavy rope, and a chain saw.

"Let's have a try at lifting him first," Roy said.

Harry flung one end of the rope over an upper branch as Roy tied the other end around Dan's waist. "If we pull together, this setup should act like a pulley," Harry said. "Ready, go!"

Dan's torso stretched until it seemed the vertebrae would never link again. But the leg didn't move.

"We'll have to cut him out," Harry said.

"If the tree lands on him, he's dead."

"We won't fell the tree, Roy, we'll just prune it."

Dan held his brother's gaze for a moment, then nodded. He was calm, secure in his trust of the others and ready to follow their lead.

"All right," Roy said. He stepped to the tree.

Harry started the chain saw. With Roy underneath Dan, straining to push him up and away from the blade, Harry set his boots solidly and began to cut. He made notches in two of the four upper trunks, the apex of each V coming within two inches of Dan's leg. Dan watched dispassionately. Moments after Harry finished, gravity took over. The notched trunks shifted out and down.

"On the count."

"... three."

Roy and Harry lifted Dan from the tree and laid him flat on his back on the ground.

"Straighten it out, Dan," Roy said. "Can you straighten it? Take your time."

"I can't. Touch it. It's like ice."

Roy slowly and carefully extended Dan's right leg. Dan's breath went out in a long sigh. "How's the other one?" Roy asked.

"Numb."

"Let's get him out of here," Harry said.

Together, he and Roy eased Dan onto the back seat of the 4-wheeler. "Lock your arms around my body and hold on," Harry said. "Can you do that?"

"My grip keeps sliding."

"That's all right. You're cold. But you'll be fine. We'll take it slow." Harry eased the ATV into motion, guided it carefully away from the beech.

Dan Kleinfelter made it out of the woods alive that October. Dr. Harvey says he had help from above, and no one disputes his statement. Between dehydration and hypothermia, it was a close call. But his right leg was severely damaged, the main artery crushed by its long compression under his total weight.

After his condition had stabilized, Dan underwent an operation on that leg. The artery was replaced and much dead muscle tissue was removed between the knee and ankle. The left leg was not seriously damaged, though it registered no feeling for three days after the ordeal.

And so the story of Dan Kleinfelter's ordeal in the woods ends. Happily, considering what the outcome might have been. With hard work and patience, Dan has been making his way back to normal. Not only is he walking again, he's hunting as well. And nothing is wrong with his shooting arm. On the second to last day of the 1988 archery season, Dan took a button buck.

"I have a word to the wise, though," he told me. "I've been lucky. I've had a definite second chance, and I've learned a few things. Two are meant for sharing: Always carry a whistle in the woods, and don't hunt alone."





**WE WERE ABOUT** halfway into the corn when at least 50 doves burst into the September sky. Everyone emptied their guns: I got one bird, the only one among us.

## Twelve O'clock High

By Charles L. Kane, Sr.

**A**T THE STROKE of 12 noon on the first of September, the dove season began.

Before leaving the house, I contacted Ron Beach, a long time—and since retired—deputy and protege of the late Paul Rank, who also was a Lycoming County Deputy Game Protector. I was aware of many changes in Pennsylvania's game laws but I wasn't sure if the new 250-square-inch fluorescent orange requirement applied to doves or not. Ron informed me that it did not.

Being nearly noon, I grabbed my 20-gauge over-under and my back-up, a Remington 870, a plastic bag for birds, and several boxes of 1-ounce No. 8s, just in case I needed them. Last year's lesson was still etched deeply in my mind.

One gun is not enough when surrounded with doves and both firing pins break! A rare occurrence, perhaps only once in a lifetime, but believe me, once

was enough. But this was a new year, and my gunsmith John Stoppa assured me the gun was ready. Two new firing pins, chokes changed to modified and improved, plus a new back up. I was ready, too!

But the doves weren't. Over the first two days I went from one hot spot to another without firing a shot. Some places had no doves at all, while others had doves by the hundreds sitting on every telephone line for as far as the eye could see, but not one bird in flight.

According to John Alden Knight's Solunar Tables, the moon was in apogee and the best shooting time was 5:40, daylight saving time. On this third day, little did I know how dramatic a change would take place.

I had with me on this day Mike Mitstifer and young Mike, who had been with me the year before when things didn't go so well. This father and son

combination work well together. I feel certain they could easily lead a hunter to trophy elk, mule deer or grizzly. In fact, once upon a time they came within the thickness of a cross hair from doing just that. Unfortunately, the deal fell through. Should they ever make it to the world of guides and outfitters there will be none better.

It was young Mike who located the first birds on this trip. Mike parked the big yellow Ford truck as far from the railroad tracks as possible. His mammoth truck was rigged to go anywhere and it did.

### Birds Flying Everywhere

Things were looking up, I could see birds flying everywhere in the distance. The weather was cool and cloudy, making for perfect shooting conditions.

We entered a long field of sweet corn that had dried bronze in the summer sun. The owner was in the process of chopping the dry corn into fodder for silage. In doing so he left wide channels between each section of standing corn. Such open strips are essential for retrieving downed birds, unless you're fortunate to have a dog to do it for you. We didn't.

We moved slowly through the corn, watching and listening for darting birds with whistling wings. We were about halfway into the corn when at least 50 doves burst into the September sky. Everyone emptied their guns; I got one bird, the only one among us. Birds

continued to flush or fly in crisscross fashion overhead, at about 12 o'clock high. We quickly realized we were right along a flyway, with the river at the far end and railroad tracks down the middle, where the birds flocked for grit.

Young Mike stationed himself on the end of a fencerow, facing a utility line that ran over the corn and seemed to be the doves' main passage way from field to field. Mike and I stationed ourselves a safe distance downrange.

The action quieted for about 15 minutes then started all over again. Birds came at us from all directions, one at a time, on small groups, and sometimes in large flocks. There were high plain "drifters," high slow "kamikazes," large groups coming out of nowhere, and "straffers" low and fast.

The shooting lasted for a couple of hours, until about 5:30 when Mike called it a day. After the smoke and feathers all cleared from the air we had eight birds. I got six and young Mike had two.

Mike, standing in the center of a pile of empty 12-gauge hulls, smiled and said, "Hey, I couldn't hit those guys today, but it sure was fun while it lasted."

We unloaded the guns, retrieved our birds, cleaned up our empties, and headed for the truck, rehashing a great day's shooting, even if most of the doves out maneuvered us. I vowed to return.

Back at the cabin we cleaned our birds and made plans for a hunt the following Monday.

Due to some changes in the plans, the two Mikes couldn't make it that day, but my son—and hunting buddy—Chuck did make it, so all was well. I parked in the same place and as we gathered our gear I told Chuck to take plenty of shells because it's a long walk back to the truck to get more. We both stuffed as many rounds as our camo pouches would hold—both pairs compliments of Chuck's tenure with the U.S. Marines.

MIKE, standing in the center of a pile of empty 12-gauge hulls, smiled and said, "Hey, I couldn't hit those guys today, but it sure was fun while it lasted." Even if most of the doves out maneuvered us, I vowed to return.





As we eased our way up the corn rows I advised Chuck to try dropping the birds in the dirt strips so we wouldn't lose any. That often means holding fire until the birds clear the thick fencerow and tall corn, and taking no shots at birds flying over the standing corn.

When we reached the right-of-way doves burst into flight. For a second I didn't know which ones to swing on. I picked out the lead bird, dropped him, swung back to the rear guard and got him. A double, my very first, and right off the bat, too.

The sky was just full of zigzagging and crisscrossing doves, the likes of which my old eyes had never seen. I kept loading and firing. I had three down and a rough visual fix on each of them.

During a lull I searched for downed birds while scanning the sky all around for more incoming game.

I found the first two I had shot, and then, while looking for the third, knocked down a high plains drifter that came down in the meadow about 75 yards from where I stood. I found that one, too.

Things were going too well. Birds continued to fly, and we kept shooting and retrieving.

During another lull Chuck sought me out. His slide action Ithaca, which he bought himself as a kid, was malfunctioning. "I can't believe it," Chuck grumbled, "for some reason this gun is kicking live rounds out the bottom. I'm going back to the truck for the 870."

"Do you need ammo or anything?" he asked.

"Well, grab some more shells while you're there," I advised. "It's been a great shooting day so far, and there's plenty of time left."

I could just picture Chuck surrounded by the darting gray ghosts and dumping live ammo on the ground. I was the one who had trouble the year before. History does repeat itself. Maybe one of us should take up gunsmithing, or else just hire a resident gunsmith.

Chuck got back in position just as a new squadron of doves arrived, and the

shooting started all over again. Birds filled the steel gray sky as I fumbled through pockets filled with empties. I was so engrossed in the shooting spree that I let myself get down to only one round.

I started toward Chuck for more ammo, knowing the best shots of the day were going to appear now. They did! And I'm the guy who said he was ready.

One straffer came in real low and I was sure I could take him with the last round. I swung slightly past him and touched off the modified barrel. There was a puff of feathers and the bird dropped, but only to regain control. Then, to add insult to injury, he hovered for a second while I held a bead on a stationary target, with two expired chambers. He flew away.

I hurried over to Chuck for more rounds. He was getting low, too, so I told him to stay put while I went back to the truck and grabbed two more boxes. In my haste, I forgot to reload. Midway through the field number 11 flew by. I fired only to hear the awesome sound of double clicks.

My first thought was to check the firing pins for damage, but I didn't get a chance as more doves flew over. I reloaded and fired both barrels. All was well once again.



#### Question

What's the maximum number of people allowed to hunt together for small game?

#### Answer

No more than six people may hunt together in a party for small game.

Chuck and I continued shooting until I finally got two more to limit out.

When the smoke and feathers cleared away, I had 12 and Chuck had one. In fact, the last bird fell on the bag we had the other birds in. Chuck wasn't happy about the score, but he admitted it was one of the best shooting matches he had ever experienced.

I agreed, 12 doves at 12 o'clock high was a shooter's dream, and there was plenty of season remaining.

The following day the tide had definitely turned. Everytime I looked over toward Chuck's position, right under the flyway, birds were dropping from the sky. Not only in singles, but also at least one double. Chuck had switched to maximum fire power, his 12-gauge Model 12 Winchester. Smart move!

I was having a bad day all right. The few birds that did come my way somehow picked out my camo-clad image standing in the corn. They immediately shifted to turbo charge, executed a 30-degree roll, and crossed the county line a second later.

During a lull in Chuck's shooting, I strolled down to his stand to check on the tally. My smiling partner boasted, "I put 11 down, retrieved ten and I'm searching for number 11." He also had the bold grit to ask me how many I had.

"Only one," I mumbled.

So, knowing full well that he had the best stand, I felt obligated to make sure no one took his spot while he was out looking for his 11th bird. Standing in goldenrod six feet high, infested with yellow jackets that were exceeded in number by blood sucking mosquitoes,

while a hot September sun kept my T-shirt wet with sweat, I found it strange how we don't notice such things until the shooting stops!

In five minutes I had five birds. The score was now 11 to six—a little more respectable.

This was beginning to show all the earmarks of a father-son shooting match. At this point I didn't think I could win, but I prayed to the Gods of the Wilderness not to let my son beat me badly. Some say I don't lose gracefully, which isn't true, of course.

The doves began flying again. They came one at a time and in squadrons, and from every direction.

Chuck quickly limited out and was standing in the tall corn spotting for me. Before long I had ten birds in the bag.

I passed on a few high plains drifters, believing my little 20-gauge would never reach them in time. Then, out of nowhere, Chuck hollered, "Dad, two at 12 o'clock high, over your right shoulder." I spun around in the golden rod and dispatched a load of chilled No. 8s at the first. He folded and went in. Right behind him came the second one. As I touched off the top barrel he followed the first one to the dirt strip below.

Double out and limit out. What a finale.

Those of you who have never hunted doves are missing some of the finest hunting and shooting available. Not to mention how it prepares a shooter for waterfowling, grouse and ringneck pheasants.

If you haven't tried it, do yourself a favor and give it a try this year.

## Cover Painting by Dennis Burkhart

Canada geese represent perhaps the brightest spot in waterfowling today. While most species of waterfowl are at or near record low numbers because of chronic habitat loss and destruction, coupled with the recent string of dry years in the Midwest and Canada, where most waterfowl nest, Canada geese have become so abundant in the Northeast that in many areas they're considered nuisances. The birds have adapted well to living around man and benefited from modern wildlife management techniques. If you've yet to experience the challenges of goose hunting, don your fowl weather gear and give the sport a try this fall.





**TWENTY YEARS** of history, all wrapped up in a walnut gun stock, that's what the notches on my gun mean to me. They tell a rather subtle story, but the lessons it brought about are deeply embedded in my reflexes and hunting history.

## The Subtle Teacher

# The Single

By Robert R. Bowers

**I**N THE OLD WEST the gun fighter wore notches on his gun to serve as a personal record of the victims who fell before his fast draw and accurate fire. Such records were plainly visible and served as a warning to his enemies that his boasts were not to be taken lightly.

The notches on my gun represent something far less dramatic, and rather than fear, they usually bring knowing grins from my hunting companions. Actually, these notches mean little to any other man, except to some they may suggest extreme neglect of my hunting gun.

My gun is no fancy holster iron; it is a 12-gauge single shot. The notches on its walnut stock are not evenly inscribed,

nor are they by any stretch of the imagination symmetrical. Some are deep and rough; others are light and barely visible. More often than not, one scar overlaps another, making the entire entangled maze of etchings considerably unsightly to everyone but me. Despite their lack of ornamental class, their lack of planning and formal pattern, each notch, scratch and scar has a meaning all its own. Each one represents a lesson and a story that no one can read but me. Each scar raises within me a special emotion that I alone can feel. Together, the mass of scars pretty well sums up 20 years of hunting experiences overlapped by "stories" and teachings experienced by my dad before me. And

confined securely in among these etchings are records of the four years of hunting dad and I did together as I became old enough to carry my own gun.

Twenty years of history, all wrapped up in a walnut gun stock, that's what the notches on my gun mean to me. They tell a rather subtle story, but the lessons it brought about are deeply embedded in my reflexes and my hunting history. This story is as true and permanently etched as rings on the stump of the giant oak that fell before the woodman's ax. And no author ever wrote with more meaning or continuity than this.

Together, that little gun and I have bagged our share of game, but we missed a lot more. And the trend these days seems toward killing less and missing more as age begins to take its toll on both the gun and me.

### More Meaningful

This old shotgun, with all its scars and scratches, becomes more meaningful every passing day. It is my history book while sitting by the fire on the evening before each hunting season opens. It is my conversation piece when conversation lags, and my cherished hunting possession when walking through the brambles.

No longer do I need to look down at the gnarled grain as I walk through the woods. I have fondled those scratches so often, and subconsciously felt each nick and notch while standing for squirrels or walking for birds, that I can read their story by braille.

My gun is not what one would call a trusty weapon. Even I recognize that it has seen better days. Many times I've threatened to sell it, after missing a squirrel at 20 yards and finding that the shot pattern had no center. But such hasty thoughts quickly pass, just as soon as my eye catches the ugly pattern on the stock that took two generations to design. My antagonism is quickly mellowed by just one of the long deep scratches that runs from the butt to the trigger housing. It was put there some years back by my beagle Sally, the time I found her in a thicket where a hasty

hunter had shot her for a rabbit. As I lifted her up to carry her home, she whimpered and gently gestured with her paw, and a long toenail ate deeply into the stained finish of the stock.

Other than the maze of scratches that now bedeck my shotgun from kicking rabbits out of their briar patches, there are other, more prominent markings which bring back memories of a hundred different experiences. There is a star-shape notch made when a one-pound rock fell off a mountain and gouged into the stock. My gun was lying across my lap, and had it not been there to soften the blow, the rock would have probably broken my leg—where I was a mile from any road or other man. In another case, an inch-wide section of the stock is rubbed clean of stain and polish, mute testimony to when my shotgun ate into rotted wood to brace me when the end of a log gave way under my weight.

Those are but a few of the standout markings. Mingled in between are the more subtle reminders of my hunting experiences. With this gun I bagged my first rabbit, grouse, squirrel and quail. And with it my father also bagged his first game.

People often ask why I don't sell my old single shot and buy a new, more sophisticated shotgun. I have considered it from time to time, and someday, perhaps, I'll buy another gun with all the fast-shooting advantages. But sell a gun just because it's old? Never! That would be almost as bad as selling a faithful old hound just because he was too old to hunt.

It wouldn't seem quite fair, and I might say ethical, to sell a gun that killed a boy's first game, nor a gun that had been in the family for two generations. And it wouldn't be right to auction off a gun that had taught a youngster care and patience on every shot (because he only had one shot at a time).

In my younger days I considered having the nicks and scratches removed from the old stock. I even went so far as to leave it with a gunsmith who agreed to refinish it just like new. That night,



though, I rolled and tossed in bed, thinking about what I had done and wondering what was so great about a brand spanking new finish. Why, it would be like burning a history book, just because the pages were yellowed. At midnight I called the smithy and apologetically requested that he not bother with refinishing my gun.

"No need to apologize, son," he said understandingly. "It would be a shame to wipe out all that history just for beauty's sake."

In my mind, my old single has earned a place of honor for all its years of service as a recorder of history and as a very subtle but thorough teacher of hunting skills. So, it will hang over the mantle for awhile, perhaps, and I will reminisce as I sit, reliving the years of history she has made.

When my son was seven years old he played with bow and arrows, but those were toys. He learned to shoot that bow pretty well for a young boy. He took off across the field in our backyard and "hunted" the brush hard. When Sally, our beagle, was loose the two of them ran the rabbits crazy down there in the draw. Mike would hear Sally bellow on a cottontail and he always forgot all about

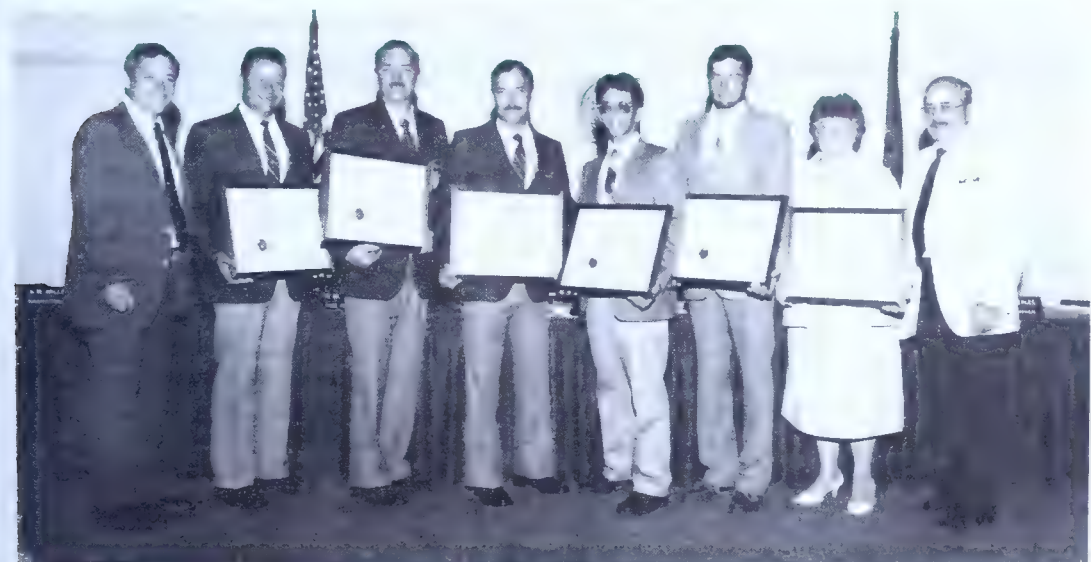
the bow. Such excitement you've never seen until you see a two-year old beagle run a rabbit over the feet of a seven-year-old boy.

Mike learned a little about hunting with Sally, but he never took part in a serious hunt until he was 15 years old. He went squirrel hunting with me when he was 12, but I carried the gun. He chased chipmunks while I sat in the big timber, knowing full well we both would go home empty-handed. As I sat there watching the young boy's excitement, it took me back 20 years when I, too, had gone with my father. I wondered whether Mike was thinking the same thoughts I thought then.

Perhaps Mike will never be a dedicated hunter, but if he does, and modern ammunition has not made it obsolete by then, and if such danger as "too powerful" ammunition is not present, I would insist that he start with my old single. I would want him to take it, use it with care and learn its lessons.

And perhaps some day he will learn to read the history on its stock—history that his dad and his dad before him wrote there while hunting. And as time goes on, perhaps he will even "write" some history of his own.

**THE FOLLOWING** personnel were recently honored as outstanding employees for 1988: Regional Director Donald C. Madl, Information and Education Supervisor Robert G. MacWilliams, Wildlife Conservation Officer Gene W. Beaumont, Forester Thomas L. Lewis, Foreman Frank S. Rhodes, and Secretary Nancy H. Stump. Flanking them are Executive Director Pete Duncan, left, and Commission President Roy Wagner.









# Four Deer In

## 1988—Legally!

I WAS HUNCHED down behind a bunch of saplings about 20 yards from a well-worn deer path. The trees were large enough to break my outline, but I would have preferred a massive oak tree for a backrest.

Prior to this quiet interlude I had been a driver three consecutive times. The last drive before lunch, and now I had my turn as a watcher. If I had had a tree to lean against, I might have fallen asleep. As it turned out, I wish I could have slept through the next several minutes.

At this point, not one deer had been located by our party of seven hunters. We had pushed the cover hard but to no avail. We were puzzled by our lack of success as the area was teeming with whitetails.

Jake Dewees, Jr., my host, was also on watch during the current sweep of cover. He was in a better position to see the four drivers and one flanker coming toward us.

I could see Jake from my vantage point. He was kneeling in a cut corn field 40 yards to my right. Several yards to the left of me was a high fence which the deer usually avoided. I felt certain that any deer trotting in my direction would be well ahead of the drivers.

The stage was set for another dry run; so I thought. Nevertheless, I had my usual daydream about a huge Boone and Crockett trophy, one with all rack and no brains. The deer would come stumbling up the trail then walk into a hunk of lead fired by Yours Truly.

Suddenly, my attention was drawn to a slight movement in the distance. The sound of cracking branches soon followed. Six deer were sneaking along the path. When the animals came to within 15 yards of my stand they abruptly

halted. The buck in my fantasy failed to materialize; there wasn't an antler among them.

A big doe in the group, standing broadside, presented a very appealing target. I had one slight problem. Yes, it was the first day of buck season. I was hunting in Pennsylvania's Southeastern Special Regulations Area, though, where both antlered and antlerless deer are legal during the season. Antlerless deer were legal game, that is, with the proper county "doe" license, which I did not have. I, therefore, could attempt to take only an antlered deer.

The small herd continued to mill around, but their actions indicated a quick exit would be forthcoming. I didn't have time to grieve about having no antlerless tag. I had to act quickly. My comrades had antlerless licenses and would have been most happy to be in my boots.

To make a short embarrassing story shorter, five of the deer nearly ran over me. The remaining one doubled back between the drivers. All six whitetails had gotten a reprieve. Not a single shot was fired.

That hunt occurred during the 1984 season. Circumstances beyond my control kept me from making my usual trek north. So when the invitation came to hunt on a couple of farms in my home county, I responded immediately. I failed to fill my tag that year but I had such a great time that I soon began to look forward to the 1985 season.

The decision to purchase a Chester County permit in 1985 did not go unrewarded. I took a fine doe immediately after a light snowfall while hunting by myself. The next year, 1986, found me in the same area. The doe I got that year dressed out at 122 pounds, larger than

**By Carl W. McCardell**

most "mountain bucks" I had seen taken in previous years.

The 1987-88 season had not been very productive. As Pennsylvanians were ringing in the New Year of 1988 I had yet to collect a deer. And adding insult to my situation was that I had two tags to fill — this was the test area for the Game Commission's bonus tag plan.

For unknown reasons whitetails had avoided me for more than four weeks. Whether I was a driver, watcher or hunted alone, I could not get within range of a deer.

I still had better than a week to hunt in the long, six-week season here, but the way things were going, I didn't get my hopes up.

My only hope was that a change of the calendar from 1987 to 1988 would produce a change in hunting circumstances. On the second day of the new year I, indeed, had my prayers answered.

Don Dewees, Jake's brother, and I were the only two brave souls trying to put meat in our freezers. The weather had turned cold and nasty. We never saw another blaze orange coat the entire day.

The crusted snow we encountered did not deter us as we searched for fresh deer sign. Unsuccessful from 8:30 in

the morning until mid-afternoon, we decided to try one more spot.

We had walked only a hundred yards or so after arriving at our new location when I heard Don fire three shots. We quickly got together and investigated the spot where he had seen the doe. "I must have shot over her," Don told me. A thorough search of the area turned up not so much as a single piece of hair.

Don insisted that I flank him while he followed the trail. Then, as the woodlot widened, I could circle into a field to my left and then sneak back in at the opposite end where I could then take a stand by a large oak tree.

Our plan worked. Ten minutes after Don began to pursue the small doe, she came running directly past my position. The rest, as they say, is history.

With the taste of fresh deer meat in our mouths, the last Saturday of the season, January 9, found us in pursuit of whitetails once again. The weather had not gotten much warmer, but a fresh blanket of snow made the landscape, not only appealing to the eye but quieter as well.

I was keyed up when I arrived at Don's house that morning. I had just received my GAME NEWS in the morning mail, and in the magazine was the first story of mine to appear in it. Nothing could possibly top this, I remembered thinking to myself.

Before the last day had ended I filled my second 1988 deer tag and two surprises came along with the huge deer.

First, the antlerless deer turned out to be a buck which had dropped its antlers. Secondly, the deer happened to be one which Don and I had particularly hunted for on a number of occasions.

Several times over the course of two seasons we encountered deer tracks containing small spots of blood. We assumed the deer was injured and had tried to get it.

Investigation of the leg revealed a large gash on the underside of the



NOT LONG after issuing that doubting statement, a nice buck wandered into shooting range. Where was he when it counted, I wondered.



slightly deformed hoof. We guessed it might have been cut on corn stubble and never properly healed.

November did not come any too soon for me. My freezer had been void of venison long enough.

The bonus deer tag had been implemented on a state wide basis because it had proven so successful in the Southeastern Regulations Area. Now, hunters across the state would be able to experience what I had done early in the year—legally take two deer in one season.

Opening day in Chester County started out with driving rain. Later, in the afternoon, the sky brightened. There had not been much hunter activity on the property I was hunting.

As the season progressed, I began to feel the way I had a year earlier. I saw quite a few deer, but they were out of range for slug shooting. A couple of bucks even teased me, showing themselves from a safe vantage point.

The deer herd had been thinned somewhat and the remaining animals were extremely cautious. Some of the does I encountered ran like rabbits through the thick brush. Many times their tails remained down, not up and waving.

Don Dewees called me one evening, December 8 to be exact. "Suppose I wander around the woods while you wait at your favorite stand tomorrow morning," he suggested. Not wanting to refuse such a kind offer, I quickly agreed.

The sunrise found me sitting next to a tall maple, surveying a familiar deer trail. When I heard some crows starting to make a fuss I checked my watch. Must be Don starting his drive, I thought.

Although I couldn't see Don, I followed his progress by the crows' activity. Suddenly, I heard crunching leaves. Thinking it was my buddy coming, I almost stood up.

The sound grew louder and I could tell it was not one man walking but, instead, a small band of deer headed my way.

Running full throttle, the three

antlerless animals seemed as though they would pass by just out of range. But then one of the deer turned and came directly toward me.

I hurried my first shot but made a clean one on my second try, when the animal turned broadside only 20 yards away.

Three days later, during the first day of the statewide antlerless season, I was back in the woods.

The morning was bitter cold with temperatures in the single digits. I only lasted an hour and a half. Deciding to call it a day, I drove home.

I currently live on the west side of Route 100, the Southeast Special Regulations area boundary, which puts me just outside the area. The doe season lasts the typical three days around my home, but I hadn't planned to hunt there at all.

My plans quickly changed, though, when my landlord reported seeing six deer behind the house. We grabbed our rifles and took stands to watch for the elusive creatures.

Fifteen minutes went by without us seeing even a tiny bird. "Are you sure you saw deer coming this way?" I cautiously asked Butch Reeder.

Not long after issuing that doubting statement, a nice buck wandered into shooting range. Where was he when it counted, I wondered. After taking his good old time walking through a clearing, five doe streaked by. We each picked out a target and fired.

The large doe I had shot at hit the ground. The one Butch shot at kept on going. Not finding any blood from his deer we quickly dressed out my prize.

The next day Butch got a deer in nearly the same spot. I believe I was just as happy for him as if I had gotten it. Being his first deer, he was happier than normal.

We chatted about the number of deer I have taken over the years. I had thought about the possibility in January but now realized that I had the privilege of being one of the first people to shoot four deer in Pennsylvania in one calendar year—legally.



Connolly



# Goose Magic

By Howard Whiteman

IT WAS A COLD and dreary morning. The rain pelting on the rooftop confirmed that it was pouring. "We've got to be idiots to go out in this rain. We'll all catch pneumonia for sure," my father said half jokingly, half seriously.

I rolled out of bed and started to dress. "Come on," I said, "the geese are waiting."

Several minutes later we were dressed, had the Jimmy loaded and picked up my friend Scott. We were heading toward Pymatuning. The air was filled with excitement as we nervously talked of the coming hunt.

The rain, we all agreed, certainly helped our chances of shooting a goose. The entire night had been overcast with pouring rain, which meant the geese would stay on the water at night and come to the fields to feed in the morning—rather than the other way around. If the rain kept up, we knew they would have a late start, and little action would occur before 8 a.m., the official opening hour of the waterfowl season.

As we drove through Pymatuning a swarm of parked cars greeted our tired eyes. We obviously weren't the only ones hunting today. But because this was the opening day for Canada geese, the crowds did not surprise any of us.

We rumbled over dirt roads through the Game Propagation Area, and finally reached the Game Commission's Controlled Goose Hunt Headquarters. As we pulled into the crowded lot I spotted Jeff Cross, the fourth man in our group, as he parked his Land Cruiser. We called him over, and I introduced my father to my good friend. After parking, we hurried to join Jeff as he kept a place in the line of permit holders for the day's hunt.

We were about to participate in this hunt only because I had been lucky enough to receive one of the goose hunting permits through a Game Commission drawing. Such permits are often

hard to obtain, and many people have applied for years without ever receiving one. Not only had I been lucky enough to get a permit on my very first try, I was also the very first picked in the state that year.

The permit allowed three hunters and myself to hunt on the controlled shooting area for one morning of the season. None of us could then return to the controlled area to hunt anymore that year. Obviously, our hunt was meant to be very special from the start, and all of us felt very fortunate to have the opportunity to experience it.

While standing in line Jeff talked of hunts he had experienced here in past years, and of our excellent prospects this day. As I looked around the room I marveled at the amount of camouflage present. Everyone except for the Game Commission personnel was covered with an assorted patchwork of dull brown, black, and olive green clothing.

## Interesting

The headquarters itself was interesting: an efficient check-in station; rows of duck decoys cut in half and glued against the wall to aid hunters in identification; and a goose decoy rental service where one could rent enough realistic field decoys to convince any goose to set its wings.

The wait was not long and we were soon at the blind station. We met an officer there who explained the rules and regulations, and using bingo-type lottery balls issued us a blind. As luck would have it, we received blind number 13.

Once we figured out where we were going, we headed back to the cars and made the short trip to the parking area closest to our blind. Unpacking the guns, decoys and accessories took little time, and we were soon on our way. It was already beginning to get light, but

few birds were flying because of the rain and overcast sky. The weather conditions could not have been more perfect and our confidence soared.

The walk to the blind was not a long one. Passing blind number 12, we came to our stake approximately 200 yards down the line. We quickly set the gear aside and began setting out decoys. Jeff had made a dozen or so silhouette decoys and two full-bodied birds. About half of his birds were in a feeding position; the others stood upright as sentinels or guards. The silhouettes were made from masonite, cut with a band saw to give the goose profile, and then expertly painted by Jeff. Half-inch dowel rods completed the birds, and were used to stand them in the ground. The full-bodied decoys were made of heavy duty floatation styrofoam and wood, with wooden heads. They were originally made for placing on the water, but were just as useful as field decoys. These decoys could literally be stepped on without harm.

### Natural Look

We spread the dekes out sporadically, making sure some were facing each possible direction, so we wouldn't miss any geese. To finish the spread, we added a half dozen doves several yards away to give the decoys a more natural look.

Finishing our field work, we began to fix up the blind. The blind itself was simply two benches situated between two rows of corn, and surrounded on three sides by wire and wooden stakes. It was entered from the open side, and was rather comfortable. We quickly stored our gear and began to arrange the cornstalks in front of us so we'd have enough shooting room. Once that job was done, we sat down and waited for the shooting hour to arrive.

While waiting, I realized that every blind was almost exactly the same as ours. Each was situated in a long stand of corn, which gave the appearance of a natural uncut field. In front of each blind was a cut grass field for easy hunter access and easy landings for the geese. It was in the cut field that the

decoys were placed. Looking around, the decoys of each blind on either side of us were visible, and each seemed to have a large spread.

The wait was maddening. We were ready by 7:15, and the geese began flying shortly after that. Literally thousands of geese flew by, looking over our spread and wanting to hear the goose calls. Many flocks came within easy range, with some flying directly over our heads, their honking voices chilling us to the bone. We crouched in the blind, with our heads held low, so the big birds wouldn't spook. We didn't call, of course, because we couldn't shoot at any that might come.

Two birds landed within our spread and walked around for several minutes. My father watched them stroll around, until they walked off to our right to find more interesting company.

At 7:45 we loaded the guns, and the sounds of brass shells hitting the metal of the guns spooked the two birds into flying. At this point we were filled with anticipation. We chuckled to each other as one flock after another flew by within easy range. By 7:55 we were candidates for an insane asylum. The anticipation was almost unbearable, and quotes such as "Look at this . . .", "I can't believe this . . .", and "Oh, my" were commonplace. The exhilaration was indescribable. We each knew right then that this hunt was going to be golden. All we had to do was hit the birds.

By 8:00 some shooting had already occurred, and we decided to take a crack at the next flock to pass by. Jeff and Scott had already started calling, their accurate honks almost too realistic to believe. They used two differently toned calls to sound like two different geese, which gave us a very natural sounding decoy rig. The flocks weren't as common once the shooting started, but before long one began to come close.

"Almost, almost, NOW!" Jeff called, and all four of us stood up and fired. A bird dropped at Scott's first shot, while the rest of us somehow missed. Although this was actually hard to believe



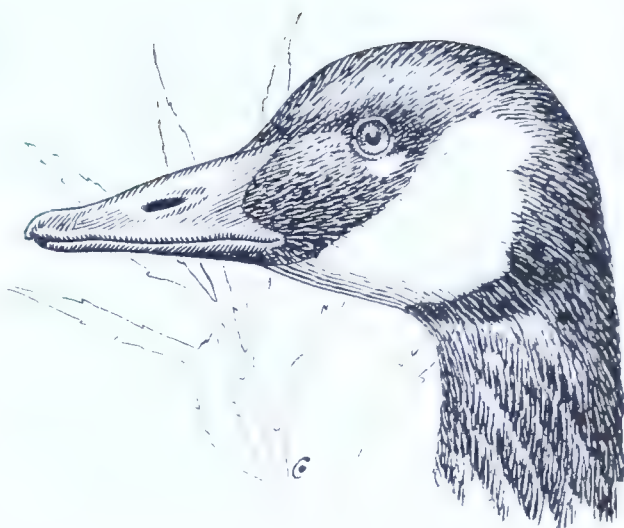
**TWO BIRDS** landed within our spread and walked around for several minutes. My father watched them stroll around, until they walked off to our right to find more interesting company.

at the time, I realized I had shot at the flock. It's imperative to pick out one bird and concentrate on it alone. Regardless, we had one down, and Scott quickly retrieved it. Taking it to the decoys, he set it in a typical sleeping pose, with its neck tucked under its wing. As he ran back to the blind, we all voiced our congratulations at his success. Scott has shot many geese before, so it was no surprise that he scored on his first shot.

Jeff and Scott began calling again, and soon a pair of birds came near. As soon as we determined they were within range I quickly picked out the second one and shot. I missed. Jeff fired and missed, too, as I pumped my borrowed 12-gauge. Swinging through the second bird again, I touched off the shot as the barrel passed the goose's head. To my amazement, the bird dropped. "Good shot. Howard!" Jeff yelled as I looked at the bird in dazed astonishment.

Waking up from my stupor, I ran out to retrieve my goose. It was a handsome mature bird, and as I hefted it I felt a real sense of pride and accomplishment at my first Canada goose. A tinge of sadness at the death of the creature was also present, but the excitement of the hunt drowned the feeling almost instantly. I put the bird near Scott's, and positioned the head and body into the sleeper position. Running back to the blind, my father shook my hand and excitedly congratulated me. He was as happy and excited as I was.

As we settled in for the next flock Jeff found that his call had become wet from the rain and wasn't working, so he started to take it apart while Scott continued calling. Several minutes passed before any more birds came in, but another pair finally entered shotgun range. Jeff waited for my Dad to shoot, and my Dad waited for Jeff. Finally, Jeff shot, hitting tailfeathers on the trailing bird. He increased his lead and shot again,



this time connecting. The bird set its wings and sailed downward. It landed about 200 yards away, and we marked the bird's location as Jeff and Scott went after it.

While they were gone, I thought I'd hop out and take some pictures. I didn't think any more geese would come close without us calling. Before I could get the camera out, however, a flock of 12 to 15 birds flew into view. Neither my father nor I were sure if they were in range or not, as we were not very experienced goose hunters. Dad got up and fired, though, and one of the birds set its wings, obviously hit. It sailed down and hit a small puddle about 100 yards away, making a huge splash. We set out after it, and found it dead among the cornstalks. As I picked up the huge goose, I thought, boy, Dad must have gotten a mature one.

It wasn't until I began carrying the goose back to the blind that I realized how extremely heavy it was. I saw Jeff and Scott coming back with their bird, and we reached the blind almost at the same time. The two of them thought I was dragging a boar. Jeff informed us that Dad had shot a greater Canada goose, a "super race" from which the other Canadas were supposed to have descended. The goose was approximately twice as big as our other birds, and lying next to mine it seemed gigantic. Dad was ecstatic.

Jeff's goose had gone a long way, almost to the next blind. They had to be

## Goose Blind Applications

Applications for goose blinds at Middle Creek and Pymatuning will be accepted from September 1 through September 20, after which public drawings will be held to determine blind holders. Application procedures and an official form are on pages 25 and 26 in the current digest of Pennsylvania hunting and trapping regulations. Although waterfowl seasons and bag limits were unknown at press time, tentative shooting hours at Pymatuning are from sunrise until 1 p.m., and at Middle Creek from sunrise until 1:30 p.m. Shooting days at Pymatuning are Mondays, Wednesdays, Fridays and Saturdays; and at Middle Creek they are Mondays, Tuesdays, Thursdays and Saturdays. Hunters are reminded that an individual may apply to only one area per year, and may submit only one application per year.

careful not to get shot by accidental spraying. They finally caught up with the bird, though, a bird of the year, and finished it off.

As we stood in the field talking, I looked at my watch. It had taken us only 35 minutes to limit out. It was simply amazing that the hunt had gone by so fast and had been so successful. Congratulations were levied all around, and a lot of thanks came to me for inviting my friends to the hunt.

A photo session was in order, so we each stood with our birds for photographs by Jeff and myself. As we did this, more geese flew over our heads, seemingly oblivious to us, either because they did not recognize us as hunters or, perhaps they somehow sensed we were done shooting for the day. Regardless, it was amazing to watch the birds come so close while we were out in the middle of an open field.

With our hunt over, we gathered the decoys and other gear and hiked back to the car. Scott was ordained goose-bearer, and all four birds were strapped

around his shoulders. The trip to the cars was a joyful one, marked by cheerful talk of the wonderful hunt we had just experienced.

Other hunters had limited out early, and we met several loading up their cars. After loading ours, we decided to take the scenic route back to the headquarters. Driving along a back road, we spotted a fox hunting through the fields, probably looking for an easy meal of an unclaimed cripple. We were sure his stomach would be full that night. Although no one enjoys the thought of losing a cripple, knowing that predators such as the fox would find and finish off the bird helps remove some of the remorse.

Along the road we passed part of the wildlife refuge that borders the controlled hunting area. Thousands of geese could be seen milling about the shore of a pond and the surrounding field. The simultaneous honking of so many birds was a sound that I will always remember. I had never seen so many animals together in one area before. The safety of the refuge was really a magnet to the geese.

After reaching the headquarters, we took our birds to the check out station, where an officer examined the geese, and removed the band that was on Scott's bird. I filled out a hunter report card as the officer approved our take. Altogether, we had fired 19 shots and accounted for four geese. We all agreed that for 35 minutes of hunting, we had done a good job.

Jeff took the birds so he could skin and mount them as field decoys. He would clean and dress the birds, and give us the meat that night. As my father said goodbye to Jeff, I knew he was suitably impressed with him, and had found a good friend.

The ride home to Meadville was filled with more exhilarating talk of the hunt. "Well, are you glad we went out hunting this morning?" I asked my Dad.

"You're not kidding!" he replied, and I knew that neither of us would ever forget the goose magic we had found that day.



# Suburban Traplines

By George L. Harting

**I**T WAS A MINK, as I suspected. The crushed carcass lay in sight of a municipal center, in the heart of a busy hamlet that bears the brunt of community college traffic. The victim had made an urban meadow its home. Rainfall had been minimal all summer, the streambed was dry and fish had perished. Had those conditions driven the valuable and elusive furbearer from the meadow into streets and town to find sustenance? Whatever the answer, the incident affirms that furbearers do make their homes on civilization's doorstep.

Fur traders are an integral part of the early American tradition. The aura of trapping traditionally suggests wilderness, danger and privation in far places. It is, therefore, rather paradoxical to learn that lucrative suburban traplines exist today, often within walking distance of our homes.

Poudre Lake in the Colorado Rockies is reached by an improved road. One reflects on what the area was like in 1836, when French trappers representing the American Fur Company hid their powder there to save it from the Indians. Those adventurous souls saw fit to scout the country of the Great Divide while following the trapline that brought lucrative returns when furs reached population centers. Similarly, the territory surrounding Hudson Bay provided opportunity for hardy souls to pursue the furbearers. It was, however, a rugged occupation in rugged country, no place for the tenderfoot. Each fall our Indian guide would stock up a minimal supply of provisions. He left his native Canadian province for the lake areas of Quebec where, in isolation, he inhabited a trapper's shack. When lakes froze and snow covered his territory, he buckled on his snowshoes, backpacked his pelts and hit the 50-mile trail for home.

With such a backdrop one forgets our northeastern states played an important role in the fur industry. It is asserted that furbearers were so plentiful throughout Pennsylvania that shipments from here exceeded the cargo from New York and Newfoundland combined. The trails of the furtrader in the 18th and 19th centuries extended from eastern Pennsylvania south through Maryland and west into Ohio.

**By 1860**

American history reveals that whenever natural resources abounded exploitation followed. The wildlife resources of our country are no exception. In an article titled, "I was a Market Hunter," LeRoy Kneir stated: "By 1896 game in Pennsylvania was being slaughtered to such an extent that I felt there soon would be nothing left to hunt ever again." In 1840 the state's General Assembly had passed legislation to encourage the destruction of wolves and panthers. The bounty on an adult wolf was \$25 and panther killers were equally compensated. By 1860 it is reported "the wolf had practically disappeared from Keystone State territory. Even the few cunning survivors were given little rest." With relentless pursuit of even smaller furbearers, one wonders how it is that so many of these creatures survive and are available for trappers to pursue in this final quarter of the 20th century. The feasibility of lucrative suburban traplines is ample testimony to the resiliency of our wildlife, the way they have learned to "roll" with the impact of civilization by adapting to life around mankind.

On a warm March Sunday morning a group of adults felt their church classroom needed ventilation. Upon opening a basement window, a gentleman was startled to find three muskrats trapped





in the window well. Muskrats can certainly travel, but the fact they made it to our doorstep is the surprise. Actually, the number of furbearers thriving in our populated areas is equally remarkable.

The municipal center for one of our fastest growing townships is just across the street from a three-acre pine grove. One day an employee for the owners of the grove had reason to consult the township office. As he passed under a large dead ash tree located just off the busy highway, a rustling in the branches attracted him. He responded just in time to observe a half-grown raccoon scramble for the protection of a den located in the tree. It's routine in spring to find our streets littered with many wild animals, and furbearers are prominent among them. The preoccupation with the mating ritual causes adults to live dangerously and the inexperience of the young often proves fatal. The presence of the fox, raccoon and mink among the casualties indicates that species considered shy and reclusive are nonetheless an integral part of the suburban scene.

Basically, trappers are motivated by economic incentives. That was true in pioneer days and in many respects it still is today. History's record of fighting among frontiersmen, the willingness to undertake dangerous adventures demanding exposure and privation, and the seeking of shabby deals with Indians, indicate a profit motive. Such undertakings can not be listed as sport. Traditionally and currently, trappers may truly be persons tuned to an outdoors orientation. But in the final analysis, trapping is still a lucrative undertaking.

Support for the foregoing assumption is not difficult to find. During the Depression days of the '30s, I found little fun in rising at 4:00 a.m. to light a kerosene lantern and run a trapline before barn chores were begun. The fierce competition by town residents for the trapping area on our farm pointed the way to a monetary motive. Many of us felt compassion for the young lad who

had his muskrat pelts stolen; he'd wanted to use the income to buy a new suit which his deceased father no longer could provide. Many of us remember how much a Christmas gift depended upon trapline money.

Indications are that motives haven't changed much since then. A young man visiting with his former high school teacher was jubilant about the \$1000 income from his trapline. He indicated what it meant toward the support of his wife and newborn child. A young farm lad reporting his results underlined his remarks with the terse assertion, "God was good to me." Trapline motivation lies in the fact that a renewable resource can be harvested and turned into economic benefit.

While the motivation for running a trapline has changed little since frontier days, the methods of furtaking have evolved considerably. Prior to 1800 bear pens were a common sight, and baited wolf houses were equally prevalent. The design was such that with the activation of a baited trigger, a pole would fall as a barrier to prevent the animal from escaping the enclosure. Snares designed to entangle the animal's foot and secure it, and deadfalls were other methods used to inactivate an attracted animal.

Several dates for the invention of the leg-hold trap are suggested, but this tool, which is attributed to the ingenuity of Sewell Newhouse, probably was invented during the 1820s. Commercial manufacture of the device, however, did not take place until 1848. And use of this traditional furtaking implement did not, as often suggested, experience universal approval. As a result, throughout the years attempts have been made to make traps more efficient. A popular effort in that direction was the development of body-hold devices. With this improvement, underwater sets normally result in instant drowning, and on land the devices prevent the trapped animal from escape. It is a device that allows a more humane and conservation minded approach to furtaking. A re-



**INDICATIONS** are that motives haven't changed much over the years. Many of us remember how much a Christmas gift or new suit depended upon trapline money.

has a drawback: the trap is a killer. This hazard restricts its use in some areas. It is a system, however, that has been designed to take furbearers ranging from the small slinky weasel to the plump and robust beaver.

The more modern, soft catch trap is an innovative improvement on the traditional leg-hold system. The use of rubber jaws that can tolerate cold weather or boiling and will not harbor human scent is designed to capture animals without causing unnecessary injury. In actual tests, the system has been designated as "... a very welcome tool for harvesting."

In addition to the cushioning effect of the replacable rubber jaws, the animal's pull is dampened by use of a spring in the chain. The chain is also fitted with two swivels—one at the staking end, and another at the trap end, and that one is fastened to the bottom center of the trap rather than the side. With this design the tumbling and twisting of a captured furbearer shouldn't result in leg injury. It appears, therefore, that the modern trapper has something very positive with which to counter anti-trapping sentiment.

Suburban trappers, of course, cannot be freewheeling. Successful participants point out that the presence of domestic animals—cats and dogs—demand special strategies. Abandoned barns in housing developments harbor skunks and opossums and, especially, raccoons. When dogs pursue these critters, dilapidated barns offer sanctuary. An acquaintance avoids baiting sets for raccoons and foxes. By using only scent and urine he limits the taking of cats and dogs, which is especially important because he relies on their owners for trapping privileges. In some instances, he reports, the activity of dogs is so perpetual that sets of any sort are impractical.

For a half century now, the farm boy

straining pin prevents the body-holding device from triggering. When the trapped animal stretches the trap chain, however, the pin is pulled and the body-gripping mechanism is released. This delaying feature prevents the animal from being pushed from the trap before a secure hold is accomplished on its foot.

A generation ago a new and revolutionary implement was introduced with the invention and manufacture of the body-gripping trap. A new and improved design of this body-gripping trap features a four-way trigger which can be set off by an animal pushing upon it from any direction. The design is so simple that a damaged trigger can be replaced in the field using only pliers. At least one design is available with corner loops which prevent springs from sliding around the frame. This feature keeps constant pressure on the trapped animal for a quick kill.

The body-gripping system has found favor with serious trappers. Animals almost never escape from these devices, and muskrat trappers affirm the design is most efficient. It's the body-gripping trap that's often called upon to eradicate burrowing furbearers from farm ponds.

As is usually the case with ingenious inventions, the body-gripping design



trapper and the professional have had a ready market available for their furs. The community furtrader has always been a popular businessman. I can recall how the role of fur-buying was passed from father to son to grandson. In some instances, also, the community trader would fill the role of traveler-buyer. In days when transportation was restricted, rural families would welcome him at their door.

Mail order furtraders still practice in our time, but there are fewer of them now. In the '20s and '30s mail order houses solicited business by running ads in magazines that catered to rural life. To attract business, dealers frequently offered trapping tips and helpful literature to amateurs. My window-sill in the old farm house was loaded with such material. Of course, a price list and grading schedule was a part of each mailing.

The community furtrader is still very much a part of the trapping scene; his role is one of convenience. Many of today's amateurs are unable or unwilling to skin, stretch and flesh the animals they trap. They are quite willing to accept a smaller payment for the catch and leave the skinning chore to the buyer.

The mail order fur house is still an acceptable market. To feel confident with such transactions one needs to be aware of the grading schedule used by a potential buyer. One also needs to know

about separating pelts into prime and unprime categories. A reputable furhouse will furnish price lists and grading schedules that are reliable guides for cautious trappers.

Fur auctions represent a relatively new market. In some communities sportsmen's clubs take the initiative to set dates, solicit buyers, and advertise the auction to the trapping community. There are advantages with this system: Competitive bidding can have a positive effect on prices. Also, a trapper can withhold pelts from the auction when he thinks a better price might be found elsewhere.

Today's trappers have little trouble finding a market for their catch. The bottom line, however, is bound to be better for the participant who can skillfully skin, stretch and flesh his catch. In addition, a thorough knowledge of how supply and demand cause prices to fluctuate is as rewarding in the sale of raw furs as it is in any other basic industry.

David Peterson put it curtly: "Fortunately our forebearers didn't consume it all, and even in 1985—some 150 years beyond the heyday of trappers and traders and painted faces . . ." There's plenty for those who pursue the suburban traplines. A renewable resource is still being managed as the surplus that flourishes on our doorsteps is harvested. This effort is mutually beneficial to the trapper, the processor, the consumer and, ultimately, all of society.

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# STICK & STRING TIME

FRANK GIANCOLA, above, West Chester, stayed in Chester County to find this 7-point. Rick Hansen, below, Charleroi, shows off his Washington County trophy to his son Ricky.



STANLEY HORENCY, left, and his brother Ed each got a buck in Washington County. Stanley's was an 8-point and Ed's a 5-point, and it was the second year in which they each got a deer within days of another.

DAN TOLOTTI, Weston, dropped this 145-pound 10-point in Luzerne County on the final day of archery season.

DAN BACHMAN, New Tripoli, dropped this 9-pound 9-point in Lehigh County within 15 yards of his stand.







**JAMES YOUNG**, Mansfield, went to the "Grand Canyon" area of Tioga County to find this 170-pound 8-point.



**JES LANDIS**, Quarryville, went to Tioga County for this 8-point. He connected on a 20-yard shot during the first hour of last year's opening day.

**McMURRAY**, Wex-  
poses with his  
ound 9-point  
a 20½-inch  
l.



**JOYCE RUESS**, Downingtown, dropped this 6-point in Chester County.

208-  
ed to

**RICK COMP**, Enola, made a 35-yard shot to drop this 155-pound Cumberland County 8-point.



**MARK BLOSE**, New Tripoli, dropped this Lehigh County 8-point on the last Thursday of the '88 archery season.





# FIELD NOTES



## Fancy Head Gear

**SNYDER COUNTY**—One of the things we asked participants during the regional envirothon competition was to identify a mounted male hooded merganser. There were a lot of answers, but one group, staying with the times and identifying it on fashion alone, called it a “punk duck.”—WCO John Roller, Beavertown.

## Wrong Role Model

**PERRY COUNTY**—During one of the many rainy days we had last May, I looked out my window and saw a grouse out in my lawn, grabbing and wolfing down nightcrawlers, just like a robin.—WCO Leroy Everett, Newport.



## Destructive

**BEDFORD COUNTY**—After a bear developed a liking for his chicken feed, a local man put the only remaining bag in his car trunk for safekeeping. The following morning, however, he found that the resourceful bruin had entered the trunk by peeling off the vehicle quarter panel.—WCO Tim Flanigan, Bedford.

## Try Again, Al

**PHILADELPHIA COUNTY**—Deputy Albert Lange was at a hunter-trapper education class when a young boy told him he and his family had been out spotlighting and were attacked by a large buck. When Al tried to explain that the buck wasn't attacking, that it was probably in the rut, the boy replied, “No, it wasn't in the rut, it was right up on the road.”—WCO Richard J. Shire, Philadelphia.

## Different Ethics

Middle Creek Manager Charlie Strouphar recently told me that when he went to a conference in Toronto, Canada, he remarked to a local resident about there being no litter up there. The resident then showed him why. He removed an empty cigarette pack from his pocket, placed it on the sidewalk when nobody was looking, and then told Charlie he would give him \$10 if more than five people walked by the discarded pack without picking it up. Well, the third person picked it up and placed it in a trash container. Back at Middle Creek, Charlie was anxious to try this little bit of Canadian courtesy here. He placed an empty crumpled soda cup on the visitors center floor and started counting. Finally, after more than 200 people walked by, Charlie realized nobody was going to pick it up. Our problem here is not just that some people litter, it's also that so few people care.—IES Mike Schmit, Fleetwood.

## Few Options

**WESTMORELAND COUNTY**—One of the things my wife likes about my job is that I never have any trouble deciding what to wear to work.—WCO Dennis L. Neideigh, Greensburg.



## Batting 1000

**BUTLER COUNTY**—At my request LMO Ned Weston was helping me set traps to remove a nuisance beaver from a farmer's pasture. While helping me set a Hancock live-trap, Ned was telling me of all the times he had gotten caught in his own traps. Just as he was saying he had never gotten caught in a Hancock, the trap sprung, catching him by the arm and leg. After receiving a few comments about my value as an assistant, I managed to free Ned and get the trap set. I haven't captured the beaver yet, but I'm one for one on LMOs. —WCO David Donachy, West Sunbury.

## Didn't Quit

**UNION COUNTY**—When Richard Noll, Mifflinburg, and his buddies went to camp they packed their food in a large box that had two small holes in the sides for handles. As usual, they stored the box on the camp porch, but when they went to fix their first meal they discovered a chipmunk trapped inside. Apparently, the little rodent squeezed through one of the handle holes and found himself in gourmet heaven. But just like a lot of us, the chipmunk didn't know when to quit eating, and his stomach got so full that he couldn't fit back through the hole. —WCO Bernie Schmader, Millmont.

## Fine Sportsman

**HUNTINGDON COUNTY**—I was eating lunch at a local restaurant one day last May when a person came up behind me and, with a strong southern accent, asked why I was hunting deer at that time of year, no doubt referring to the roadkill on my vehicle parked outside. I turned around to find standing right behind me the 39th President of the United States, Jimmy Carter. After a firm handshake I assured him the deer was a roadkill, a fact I'm sure he already knew. —WCO D. J. Adams, Waterfall.



## Gaining Experience

**LACKAWANNA COUNTY**—While investigating the killing of a protected bird (a turkey vulture), the need to produce the carcass as evidence found me dangling upside down through the seat in an outhouse. Suspended in this most resourceful hiding place, I couldn't help but recall the words of my mentors during my recent course of instruction at the training school. Many new and unique experiences awaited us, they said. Little did I realize what they meant by perils of the job. Oh well, I guess it's all in a day's work for a wildlife conservation officer. —WCO Keith P. Snyder, Clarks Summit.

## Big Variety

**CAMBRIA COUNTY**—In my first four weeks here I saw a coyote, bear, turkeys, many deer, foxes, rabbits, squirrels, woodcock, grouse, waterfowl, and—yes—even a beautiful ring-necked pheasant. —WCO Douglas C. Carney, Johnstown.

## Where's The Fish?

**CUMBERLAND COUNTY**—I knew the Game Commission's Bald Eagle Recovery Project was beginning to pay big dividends, but I was still surprised to find an immature bald eagle perched in a fence row in the middle of the agricultural Cumberland Valley. —WCO Jim Binder, Shippensburg.

## Naturally

**ERIE COUNTY**—Children of WCOs don't always have the luxury of spending time with their parents on evenings and weekends, because of our odd work schedules, but they do receive some benefits. For example, one day last spring I acquired an injured pied-billed grebe. It was too late to take it to a rehabilitator, so I took it home for the night. When I arrived I told my unsuspecting six-year-old daughter it was bath time, to fill the tub with warm water and to put no soap in it. Then, as she entered the tub, I plopped the little grebe in with her. Needless to say, she was quite surprised and he was happy to be back in water. There's no rubber ducks for WCO children; we use all natural materials.—WCO Shayne Hoachlander, Albion.

## That's Right, Doc

**FAYETTE COUNTY**—A while back I went to handle a beaver damage complaint and took my youngest son Steve along. As I was preparing the site and setting the trap he asked all sorts of questions. One had to do with the bait I was using. When I explained that aspen is a favorite food of beavers, Steve thought for a moment and then asked if I was going to leave the beaver a note. When I asked what kind of note he replied, "Beaver, take two aspens and call me in the morning."—WCO Stanley W. Norris, Fairchance.

## Serious Offense

**ELK COUNTY**—One evening I was pursuing a vehicle being driven on a game lands when I got stuck in the mud. As I was rocking back and forth, trying to get free, flames started shooting up beside me—my exhaust had ignited the dry leaves. I quickly put out the fire with my fire extinguisher, but I was still stuck. After unsuccessfully trying to radio nearly every officer in the state, I jacked up the vehicle, put chains around two tires, gathered every rock and log I could find to fill in the ruts, and eventually got free. It took me three hours, though, and I ended up covered with mud. The next day I caught the two guys while they were driving on the same road again, and they just couldn't understand why I gave them fines instead of just warnings.—WCO Dick Bodenhorn, Ridgway.

## Fine Hosts

**WASHINGTON COUNTY**—I'd like to use this opportunity to thank the Women's Auxiliary of the Miller's Run Grange Hall for providing the meals for our hunter-trapper education instructor seminar and our county deputy meeting. Even before this year's meals were over, several people told me they were looking forward to next year's meeting.—WCO R.M. Hough, Washington.

## Havin' A Great Time

**SOMERSET COUNTY**—I was checking out an area to do some turkey trapping when I came upon a mink track on top of a ridge. I followed the tracks out the ridge, but when the animal started down the mountain, his tracks disappeared. In their place were distinct marks five to 30 feet long. With curiosity getting the best of me I studied the marks and found that the mink had run a few steps and then slid down the mountain, just like an otter. The mink was certainly out of his range, running the mountain, but he must have enjoyed the chance to do some long distance sliding.—WCO D. W. Jenkins, Somerset.



## Good Combination

**MIFFLIN COUNTY**—Judging by the number of bear sightings, incidents and complaints I've received, this should be a good year for bear hunting. And if you're looking for a place to go, consider the southcentral counties. The hunting pressure's light, and the bruins are certainly here.—WCO Tim Marks, Milroy.



## One Hungry Owl

**TIOGA COUNTY**—Owls are supposed to be nocturnal, but not long ago, in the middle of the day, I watched a great horned owl dive into a pond and catch a full grown muskrat. He then dragged his catch to shore and ate his fill, all while being mobbed by a half dozen crows.—WCO Steve Gehringer, Mansfield.

## Same Old Fish Story

**BRADFORD COUNTY**—Wayne Barrett, Troy, watched a great blue heron pull an 18-inch largemouth from his pond, throw the fish up on the bank, grab it again, and start to fly away. But when Wayne ran out of the house and yelled, the heron let go and the fish fell 20 feet to the ground. Wayne ran over, picked it up, put it right back in the water and, incredibly, it swam away. I can just imagine the heron flying back to its nest and saying, "Boy, you should have seen the one that got away."—WCO William A. Bower, Troy.

## Hands-On Philosophy

Last spring the Allegheny Mountain and Scattered Flock chapters of the Pennsylvania Wild Turkey Federation planted 400 Japanese barberry trees and 50 large apple trees on SGL 60, Center County. Director Joe Krug coordinated the entire project and provided all the planting stock. This fine effort will undoubtedly enhance this game lands for many years. Thanks, guys.—LMO Quig Stump, Bellefonte.

## Great Progress

**BEAVER COUNTY**—Last year's 131 hunting accidents may seem like a lot, but compared to the more than 500 or so we were averaging just 20 years ago, it's obvious our hunter-trapper education program is working well, largely because of our dedicated volunteer instructors. Keep up the good work, and maybe someday in the column for the number of hunting accidents we'll see a big "0."—WCO Keith A. Falasco, Beaver Falls.



## Identical Mistakes, Too

**CENTRE COUNTY**—I thought I was seeing double. When Chester and Lester Bauer came to see me they were dressed alike from head to toe, and I learned they were 71-year-old identical twins. They came to see me for identical reasons, too, each had left his hunting license at home.—WCO George Mock, Coburn.

## In the Eye of the Beholder

**McKEAN COUNTY**—A landowner had called me several times over the years about a beaver dam that was causing him problems. He recently sold his property, however, to Ken Cogan, and Ken views the same dam as a jewel. Ken started by donating wood to the local school, and the wood shop students built wood duck boxes and bluebird houses, many of which ended up being erected around Ken's beaver dam. He also built a picnic area along the pond and, with the help of the local sportsmen, stocked it with trout to provide area youngsters with a place to fish.—WCO John P. Dzemyan, Smethport.



## Long Drop

**CENTRE COUNTY**—Handling nuisance animal complaints over the years, I've dealt with many clever critters and thought I had seen it all. But last spring, Judy Friday, Taylor Township, was visited by one of those "smarter than the average bears." Having had bear problems before, the Fridays placed their beehives on a platform atop a 13-foot steel pole. Only ten feet away, however, was a large white oak, with a heavy branch that extended out about 12 feet above the hives. After several visits to the site, apparently casing the place, the bear—who I've dubbed Tarzan—climbed the tree and either dropped or fell from the branch to the platform and then made off with a hive.—WCO Joe Wiker, State College.

## Looks That Way

**NORTHAMPTON COUNTY**—I often wonder what visitors from other countries think when they see all the trash littering our roads, waterways and fields. I hope they aren't left with the impression that all Pennsylvanians are slobs.—WCO Richard W. Anderson, Nazareth.

## 40-Year Volunteers

**JUNIATA COUNTY**—Last month marked William E. Hubler's 40th anniversary as a deputy wildlife conservation officer. Over those 40 years Bill worked tens of thousands of hours, under seven different wildlife conservation officers, five executive directors. He was involved in more than 1500 cases, and his name has become synonymous with wildlife conservation to three generations here. A special tribute must also go to Bill's wife Izzy. She answered the questions when Bill was out, cared for injured wild animals, helped pick up roadkills, and no doubt spent many anxious nights worrying while her husband was out on night patrol. The Hublers didn't just get involved with wildlife conservation, they dedicated their lives to it. Thanks, Bill and Izzy, and I look forward to many more years of working with you.—WCO Dan Clark, Honey Grove.

## Thumbs Up, Guys

**BUCKS COUNTY**—Last winter Jake and Herb Wimmer and Larry Mackey took four old tires, cut them in half, and clipped the inside edges together with copper wire, creating two semicircular tubes from each tire. They then placed the tubes in some brushy areas. When checked later, four of the eight tubes had rabbits in them. After such great success, they made 40 more, which will be put out this fall, and, as Jake reports, nobody has refused them permission to place them on their properties.—WCO Cheryl Trewella, Trumbauersville.



# Antlerless Deer License Applications

**A**PPPLICATIONS for antlerless deer licenses will be accepted from Pennsylvania resident hunters beginning Monday, October 2. Applications from nonresident hunters and for bonus tags cannot be accepted until later dates.

When applying for an antlerless license, the hunter must mail the antlerless application received with the regular (resident or nonresident) hunting license to the county treasurer. Potter County antlerless licenses this year will be handled by the Potter County treasurer, not the Game Commission.

Persons requesting antlerless licenses are reminded:

No one who has purchased a muzzleloader license may apply for an antlerless license (muzzleloader licenses must be purchased no later than September 30).

Only the original antlerless deer license application issued with the hunter's license is valid for making application for an antlerless license. No person may apply for more than one antlerless license.

The application cannot be transferred by the person receiving it or used by any other person to apply for a license.

County treasurers may accept applications by standard first class mail delivered through and by the U.S. Postal Service beginning Monday, October 2.

Antlerless license applications must conform to the following regulations: The application(s) must be mailed only in the official pink envelope (a two-in-one, mail-in-mail-out envelope). Not more than three applications may be submitted per envelope (the same restriction will apply when nonresidents apply later, and when bonus tags become available). The appropriate pre-printed number on the outside of the envelope, indicating the number of ap-

plications enclosed, must be encircled.

The "return" section of the pink envelope, with first class postage affixed, must be self-addressed.

Remittance, at \$5.50 for each application, must be in the form of a negotiable check or money order payable to "County Treasurer." Do not send cash, under any circumstances.

When more than one application is mailed in the same envelope, if any one of the applications fails to comply with regulations, all applications will be rejected.

County treasurers are to return each unsuccessful application at the earliest possible date, so the applicant may re-apply to another county where licenses are still available.

Any hunter whose application has been returned may change the county designation where he or she wishes to hunt and reapply to another county where unsold licenses are still available.

When reapplying to another county, a new official envelope, which can be obtained from any hunting license issuing agent, must be used. All licenses will be mailed to successful applicants no later than November 24.

Applicants for antlerless licenses are reminded that U.S. Postal regulations require only one first class postage stamp for each pink envelope sent, re-



gardless of the number of applications enclosed. Only one first class stamp will be required for the return portion of the envelope, regardless of the number of licenses involved.

Applications submitted contrary to instructions on the application or which are not legible or fully completed will be returned.

A hunter who purchases a flintlock (muzzleloader) stamp prior to October 1 must surrender to the issuing agent his application for an antlerless license.

On Monday, October 16, county treasurers may begin accepting antlerless license applications from nonresidents of Pennsylvania, by mail only. During the first week that nonresidents may apply for antlerless licenses, residents who have not had applications accepted for antlerless licenses may continue to apply.

Beginning Monday, October 23, unsold antlerless licenses may continue to be applied for as antlerless licenses, or they may be sold (by mail only) to both residents and nonresidents as either bonus tags or combination licenses (a muzzleloader stamp holder cannot purchase a combination license).

On Monday, November 6, any unsold licenses may be sold either by mail or over the counter in county treasurers' offices as antlerless, bonus or combination licenses. Prior to November 6, applications for all antlerless, bonus and combination licenses can be accepted through the mail only.

The timetable and procedure for the sale of antlerless, bonus and combination licenses this year is designed to

overcome problems encountered last year when unsold antlerless licenses statewide could be sold as bonus tags or combination licenses. Long lines developed at many courthouses. In some cases, nonresidents didn't get any antlerless licenses while residents received both antlerless licenses and bonus tags; in other cases, nonresidents received both antlerless licenses and bonus tags while residents were unable to purchase bonus tags.

Under the bonus and combination tag system inaugurated last year, any hunter who holds a bonus tag or combination (bonus tag and muzzleloader stamp) license may use it to harvest a bonus antlerless deer in the county in which the bonus tag or combination license is sold.

A summary of the procedure and application dates follows:

- October 2 — residents may apply for antlerless licenses, by mail only
- October 16 — nonresidents (and residents) may apply for antlerless licenses, by mail only
- October 23 — residents and nonresidents may apply for bonus tags, and combination and antlerless licenses, by mail only
- November 6 — residents and nonresidents may apply over the counter or by mail for antlerless, bonus or combination licenses.

## Southwest Game Lands Tours

The Pennsylvania Game Commission will conduct tours of State Game Lands 50, Somerset County, and SGL 108 in Cambria County. Each tour will be held on Sunday, October 8, from 10 a.m. until 4 p.m. A driving tour, displays and programs will be featured on SGL 50. On SGL 108, a walking tour is being offered in conjunction with the Apple Cider Festival at Prince Gallitzin State Park. For further information contact the Southwest Region Office at 1-800-243-8519.



## Outstanding Deputy Wildlife Conservation Officers—1988

*The deputies shown, one from each field region, have been recognized for their outstanding contributions to the programs of the Pennsylvania Game Commission during the past year. Their efforts are appreciated.*



Wilber F. Lynam  
Seneca  
Northwest Region



George S. Tkacik  
Clearfield  
Northcentral Region



David R. L. Jones  
Carbondale  
Northeast Region



Edwin J. Burns  
Saltsburg  
Southwest Region



Floyd Starliper  
Greencastle  
Southcentral Region



James M. Hoppes, Jr.  
Northampton  
Southeast Region

# The Users

**WE ARE ALL USERS.** I use you and you use me and there's nothing really wrong with that. Say we're friends. I can be your friend because you'll lead me to a lucrative business deal. That's "using" at its worst or best, depending on your point of view. Or we can be friends simply because I like your smile. That's "using" too, because you bring me pleasure, but in a much more acceptable form.

Using is the way of life, all life. People use each other and wild animals use each other. We use wildlife and, often without our planning it, wildlife uses us. Although hunters have been called "consumptive users" of wildlife, and we certainly are when there's a bowl of rabbit stew on the table, we do plenty with wild animals that is non-consumptive. In the course of a day's hunt, we engage in activities that might be called bird observation, wildlife viewing, or simply watching the one that got away get away.

As far as consumptive use between animals, there are already many volumes on the bookshelves about the relationships between predatory and prey species. The other kind of consumptive use, by animals of us, is non-existent here in Pennsylvania, except for such pests as mosquitoes and black flies. No animal in this state will eat us in one bite, and we only have to put up with the little nibblers. It's the non-consumptive ways in which wild animals make use of us that are always intriguing and occasionally ironical.

Like footsteps in the snow. There is nothing like opening the door of camp on the first day of doe season and being met by a landscape over knee-deep in the white stuff. And there is nothing quite like making those first tracks in the virgin snow cover, across the field and into the woods, where you collapse, wheezing, onto the first stump you see. Breaking a path in the snow is harder work than you've done for days, even years, and this day's just starting. As you expected, the deer aren't moving much on a day like this, maybe they are smarter than you.

But on the way back in the evening light, there are the tracks. They cut out of the woods behind you and into your footprints, their hooves finding easy walking in the shallow snow where you struggled to beat down the path. You read their ruse, the way they walked in your trail nearly back to camp, bounced across to your buddy's footsteps going the other way, and into the next bit of cover. It's not so bad being used in this way, they were just avoiding plowing through the deep snow, but ending the day deerless, you feel tricked as well.

One of the traits that wildlife shares with us is laziness. This may be another important survival tactic. Why expend a lot of energy at something when there's an easier way? Historians say that the Native Americans followed game trails in crossing the land, because the animals had already found the easiest route. Later, white settlers simply picked up on the practice and made it their own. Today some of our highways are on ancient game paths.

There's a flip side to this, when wildlife uses the byways we have made. This can be as simple as appropriating a hiking trail. In a local state park I noticed that the major off-season traffic on the hiking trails appears to be from wild animals. The deer there have added the park's trail network to their own. I not

## Another View...

by Linda Steiner



**USING IS the way of life, all life. People use each other and wild animals use each other. We use wildlife and, often without our planning it, wildlife uses us.**

only see their tracks along major portions, but I also have watched them on the path, feeding on trailside vegetation. Any time a new section of trail is added, the deer quickly make use of it.

Almost all the wild turkey sign in the park last fall was on the hiking trail and other abandoned woods roadways. There was a good reason for this. These manmade paths were free of brush and saplings, so they were easier to walk and scratch for the acorns that lay on the solid surface. Elsewhere it was not such easy pickings under the soft duff and deep, woody debris. I walked some trails for a mile or more and scarcely got out of the turkey scratch.

Bucks make great use of the park's forest roads and walking paths as runs during the rut, rubbing saplings and making scrapes all along them. I'm sure the bucks don't know and don't care that it was people who cut, cleared, and built the roadbed they travel, the long lane that is so perfect for the cruising and marking they do at a certain time of year. They think the roadway is there only for them.

Few of us plant a field of clover for the deer to eat or sow corn for the bears, and we certainly don't set out the garbage for the convenience of the skunks and raccoons, but they all use us to grow fat. When we timber our land, it's probably for the profit, less likely for game management. But walk a timbered woods soon after the cutting and you'll find how fast deer learn to use it, browsing the still green leaves or the still fresh buds on the downed tops. Even in the old cuts, I see sign that deer meander along the logging roads to travel and feed, and bed down in the open spots between forgotten logs and discarded tops, where they can see and not be seen.



Sometimes wildlife uses us close to home in unexpected and unwelcome ways. A few of us have hung out wash at the beginning of the day, to find we have the start of a wren nest in a fold or a pocket when we go to take the laundry in. Not only do we have to be the evicting landlord or landlady, but we also have to wash the item all over again. One persistent wren tried to nest in the tongue of my boat trailer. This would have been all right except the boat was used often. I had to plug the attractive little hole in the hitch every night, or by the time I got up the next morning, another nest would already be in progress. The bird did eventually choose more convenient accommodations.

This year, a family in a nearby town had a songbird nest in a decorative grapevine wreath on the front door. Visitors had to be routed to the back door until fledging time. Rather than being one sided, this was a reciprocal use agreement. The birds got a fine, protected spot in which to raise their young, and the family had an unequalled conversation piece for the duration of the tenancy. That's the sort of people and wildlife user situation in which everyone ends up happy, the kind that's unusual enough to be special.

# Fun Games

## “Ready, Aim, Fire!”

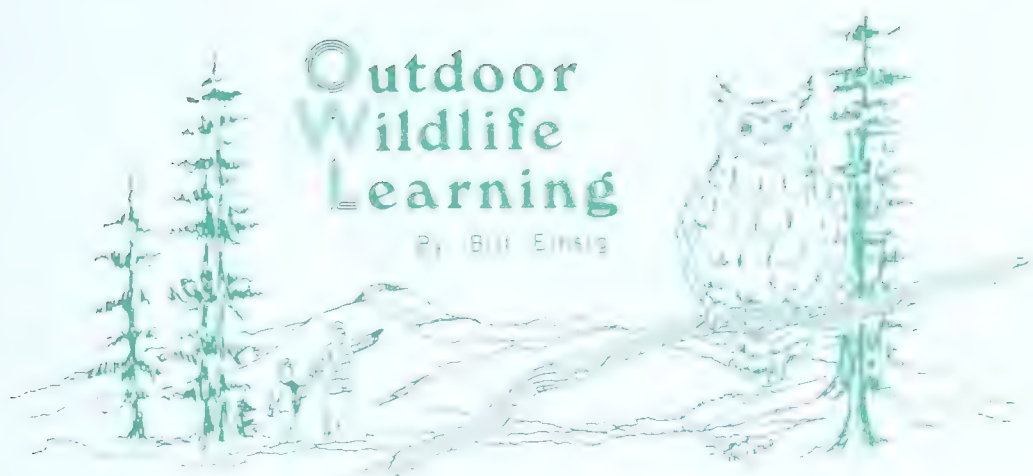
By Connie Mertz

Read each statement carefully. Find and Correct the *five* that are false.

1. Treat every firearm as if it were **loaded**.
2. You need to point the muzzle in a safe direction **only when hunting**.
3. Determining **zones of fire** when hunting with others will help prevent hunting accidents.
4. A **scope sight** may be used to identify a target.
5. One of the best things to do if a hunting companion isn't obeying safe firearm handling is **to refuse to hunt with him**.
6. Pennsylvania's safety color for hunting is **fluorescent orange**.
7. If you can positively identify a game species by **its call** and it's clear beyond the target, it is all right to shoot.
8. If another hunter is approaching your area, you should **remain silent so he doesn't see you**.
9. After passing the hunter-trapper education course (at age 12) you **are legally allowed to hunt alone**, provided you have a hunting license.
10. To learn about Pennsylvania hunting regulations, it is important that you read the **PA Hunting/Trapping Digest** which accompanies your hunting license.

Number	Correction
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## Teachers, Win a Conservation Library

**G**OOD CLASSROOM libraries take a long time to build. Teacher budgets are usually tight, and new books are often the first items eliminated in a budget cut. The teacher who can add a few new reference books to the classroom shelves each year is fortunate.

The Lehigh Valley Chapter of the Safari Club International (SCI) has made an effort to bridge such budget gaps. They have assembled library collections of conservation and outdoor-oriented publications and donate them to teachers for classroom use. This is not a loan program nor a circulating collection. The boxes are outright gifts to teachers who demonstrate a need for such materials and a willingness to use them.

SCI's library box consists of a wide range of curriculum aids. There are books, videos, audio tapes, filmstrips and posters. Many Game Commission publications are in the collections, including *Birds of Pennsylvania*, *Mammals of Pennsylvania* and Ned Smith's *Gone for the Day*. The PGC's outstanding bird and mammal poster series and a complete collection of wildlife notes are important parts of the library, too, because they will likely be used almost every day.

Filmstrips and videos from the National Shooting Sports Foundation provide classroom teachers with a convenient overview of wildlife management. They look at several game animals that once experienced population difficulties but now are out of danger due to the efforts of wildlife managers. Such success stories

need to be included in units of study focusing on endangered species because they illustrate what can be accomplished with strong public support and adequate funding.

Most of the books in the library, however, are not directly related to wildlife management or hunting. Several field guides from both the popular Peterson Series and the National Audubon Society are included. There are also books for the young geologist, astronomer, anthropologist and explorer.

*A Field Manual for the Amateur Geologist* (Alan M. Cvancara) is a primer for the natural history buff interested in the landforms and materials of the earth's surface. Much of the book emphasizes geologic features that comprise the topographic mosaic on which we live. Understanding the processes that formed the features we now explore gives us important clues as to how the surface is even now changing beneath our feet.

*How to Collect North American Indian Artifacts* (Robert F. Brand) is an exciting guide that will bring history alive for school students. Arrowheads, tomahawks, and skinning knives trigger the curiosity and imagination of every youngster. This book helps the beginner find artifacts and emphasizes the proper methods of recording the necessary information that increases the artifact's value as a bit of archeological evidence.

*365 Starry Nights* (Chet Raymo) is a fascinating book. It is organized around a calendar year and describes objects and

patterns in the night sky for each day of our annual loop around the sun. But this is more than another guide to common stars. Enmeshed within the daily entries are both folklore and up-to-date astronomy—from Cassiopeia and Cygnus the Swan to mysterious black holes and quasars.

*The Naturalist's Garden* (Ruth Shaw Ernst) is a complete handbook for the homeowner (or teacher!) how wants to turn an ordinary lawn into a rich and varied wildlife retreat. The author examines trees, shrubs, flowers and weedy plants that feed and house animals of all kinds from butterflies to bluebirds.

*The Gardener's Illustrated Encyclopedia of Trees and Shrubs* (Brian Davis) should be a basic reference for all life science classrooms. While there are many field guides for identifying native trees and shrubs, there are few popular references that cover the exotic forms that often surround our homes and schools. Students frequently bring samples of these orna-

mentals to school only to get frustrated by not finding their specimen in the standard guides to native plants. This comprehensive book lists 2000 varieties, and includes more than 600 color photographs, of the most common woody ornamentals.

The Lehigh Valley Chapter is the largest of the six SCI chapters in Pennsylvania. There are about 80 chapters nationwide. The national group is best known for promoting sport and trophy hunting, but it is also deeply involved in a variety of conservation efforts to enhance wildlife habitat and support the rights of sportsmen.

The local chapter's educational programs are particularly significant in light of growing efforts by anti-hunting and animal rights groups. These organizations have been successful in infiltrating classrooms in some counties with distorted literature that often places animal rights well above human rights. At least one radical group would ban all uses of laboratory animals, even for the testing of lifesaving drugs.

**TEACHERS** have a chance to win this chest full of books, videos, filmstrips and other conservation education materials, compliments of the Lehigh Valley Chapter of Safari Club International. Any junior high or middle school classroom teacher may enter. Look for contest rules in OWL.





The Lehigh Valley Chapter's Conservation Library is an attempt to balance the information students receive. Their aim is not to produce more hunters. They believe students should have access to accurate information so they can make informed choices and decisions, not emotional ones based on dubious propaganda.

During the past seven years, the chapter has donated 30 libraries. Most have gone to classroom teachers in eastern Pennsylvania. Each collection is housed in a rugged wooden "treasure chest" that would itself make a useful addition to a school room. The value of the curriculum materials and box has been estimated at nearly \$1000—a significant investment that promises ongoing rewards with each new class of youngsters who use the conservation library.

Teachers who receive the libraries are also asked to maintain contact with the sponsoring club. Libraries are frequently updated with new materials, and teachers who demonstrate continued interest can watch their libraries grow.

## Conservation Library Contest

The Lehigh Valley Chapter has donated a Conservation Library to the Pennsylvania Game Commission. OWL would like to give that library to a Pennsylvania teacher who demonstrates a significant need for these materials.

Contest rules are quite simple. Any junior high or middle school classroom teacher may enter the contest. Entries

consist of a narrative, on school letterhead, explaining how the materials will be used, what specific needs they will meet, and some estimate of the number of students who will use the materials each year. Please, do not include documentation such as testimonial letters, newspaper clippings or photographs.

Judges will look for programs that promise intensive use of the materials incorporated into the regular school curriculum. For example, using this library as reference for class reports is a good use, but using the material to enhance thinking or problem-solving skills is better. In most cases, structured use is better than coincidental use. It is good to have such materials available for browsing during free moments, but it is better to make the material an integral part of a planned lesson. Entries that promise intensive use and integration will have an edge.

Deadline for entries is October 31. The winner will be notified by November 30, 1989. The names, and narratives, of all entrants will be forwarded to the Lehigh Valley Chapter, SCI, for consideration as a future recipient of a Conservation Library. In addition, all entrants will receive a complete set of "Wildlife Notes" and other selected materials from the Game Commission.

Entries should be mailed to Conservation Library Contest, Bureau of Information and Education, Pennsylvania Game Commission, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Entries must be postmarked by October 31, 1989.



JOE CAMMISA, Butler County, took first place in the working diver category during the decoy carving competition held at last year's Pymatuning Waterfowl Expo. This year's Expo will be held September 23 and 24 and will feature decoy carving, retriever trials, trap shooting and, among other activities, the selection of Pennsylvania's 1990 Waterfowl Management stamp/print design.



**By Jack Weaver**  
Wildlife Conservation Officer  
Centre County

THEY WERE raised on a whip-poor-will farm along the backside of a stony ridge in Tioga County. Basically, they lived off the land; their meals included wild game, especially venison. They were entitled to kill deer for crop damage, provided they adhered to the requirements of the Game Law. Very simply, that meant reporting each kill, possessing only one deer at a time, retaining the meat on the premises, and killing deer only on their own farm. To them, however, wildlife laws were a nuisance to be tolerated like summer flies. Deer were there to shoot, they figured, no matter where they were found. They were shot for food and sold for booze—beer and whiskey being as much a part of their lifestyle as poaching.

As far as I know the boys never finished high school. By the time I moved to the county, their mom had died. The father kicked the boys out and sold the farm. The money was soon squandered in the local bars. Old Ben had tangled with every game protector assigned to that district before me, and then there were the two boys, Ron and Rick. They hired on locally as farm hands whenever they needed money. And money was needed frequently to pay off game fines, mostly for shooting deer at night. Ron often bragged to me that he never used a 22 for jacklighting, always a 30-06. He said he wasn't

afraid of game wardens. Actually, I don't think he owned a 30-06. He said he could always hit 'em between the eyes if his woman held the light steady enough. But one night we caught Ron, along with his wife and brother-in-law, shooting at deer with a 22 rifle—he had missed three times.

Over the years Ron and I got pretty well acquainted. Many times I had to pick him up for not paying his fines, and transport him over to the county jail. Although crude, Ron was normally friendly enough on such occasions.

Ron's wife Wanda, however, was another story. She had about three different last names tacked on her signature, which looked like "Who's Who" of the local welfare rolls. Of all the hoofties I dealt with in Tioga County, she was the only one I ever got in a fight with. It all happened when they didn't pay their fines for shooting at the deer with the 22. WCO Lynn Keller, LMO Dave Brown and I went to their place to pick them up on warrants. They were staying with Wanda's parents at the time. Ron surrendered peacefully enough. He just went out and got in the car with Dave Brown. After all, it was getting to be a routine. But Wanda decided she wasn't going along. She ran back into her parents' house.

Lynn Keller was hot on her heels and I followed. Inside, she kept fussing with her hair and refused to go along. Lynn finally had enough and grabbed her by the arm to escort her out the door. Wanda whirled, and I caught a flash of five long, red nails aimed for Lynn's face. Luckily, I was close enough to grab her arm before it struck. Lynn and I then started for the door, with about a hundred pounds of thrashing feline between us. But it was all too much for her parents, who had been doing their best to encourage Wanda's rebellion. Her dad jumped in front of the doorway to block the exit. We had a nose to nose shouting match before he finally moved enough so we could get through. Wanda's dad had been arrested several times in the past, so he wasn't exactly fond of game wardens. Wanda ended up being cited for resisting arrest, and her parents were cited for interference. Interfering with officers in the performance of their duty never pays. In this instance it cost them another \$600 in fines. And that was quite a few years ago, today such fines would be much higher.

Actually, I first met the family through



the other son, Rick. He was picked up the first year I arrived in Tioga County, by Deputy Stan Whittaker. Rick and six others were hunting during the early small game season. No more than five were allowed to hunt small game together, and this big group was also hunting rabbits, which weren't in season yet. Then, in May of 1973, we received information that Rick and a buddy had killed a deer out of season. We got a search warrant for Rick's trailer, and found the deer cut up and soaking in the bath tub. That wasn't so bad, but Rick's commode wasn't working. Nevertheless, they had been using it anyway, and it was stuffed full. The whole scene emitted a rather unhealthy atmosphere. Rick and his buddy were escorted to the district justice in Elkland, where they pleaded guilty and were given two weeks to pay the fine. They didn't, so, as usual, we had to pick them up on warrants.

It was a few months later, in early November, when I met Ron for the first time. Ron and Rick were to become preferred customers in the years ahead. This first case involving Ron was witnessed by a couple of teenagers who were parked at what was locally known as the passion pit. This was a shale borrow pit located at the mouth of Mill Creek. An access road wound to the top where a romantic view of the mountains, and stars and a long field was offered.

The field usually harbored a herd of deer at night. So it was that the youngsters' romantic interlude was disturbed when a pickup with a loud muffler stopped and a spotlight shined on some deer in the field. A shot was fired. Then the teenagers watched someone get out, drag a deer over and load it in the back of the truck. After the deer was loaded the pickup pulled into the shale pit, but left as soon as its lights revealed the youngster's car. They said it was an old, beat up red pickup with green doors, and with three people inside. Shaken by the incident, the teenagers left for some more tranquil scenery. They drove to the town of Tioga and turned into a dirt road which, before the Tioga-Hammond Dam and relocation of Route 15, ran up a hollow to a State Game Lands. About half way up this road they encountered the red pickup with green doors coming back out. Someone hollered and threw a beer can when they went by. A little farther they found a large pool of blood on the road where someone

had dressed out a deer. The next day they called me. John Johnson, a deputy from Kutztown, was up for a weekend visit. We started an investigation with nothing more to go on than a spot of blood and a description of the truck. Eventually, we learned that Ron drove an old pickup that matched the description we were looking for. We also learned that he was working on a farm right outside of Mansfield. We paid him a visit and, sure enough, there was the old red truck with green doors. The bed of the truck was covered with blood and deer hair.

It was afternoon, but we got Ron out of bed anyhow. We took some blood and hair samples, which were in plain view in the back of the truck. For some reason Deputy Johnson and Ron didn't like each other. In fact, it was all I could do to keep the two apart. When things calmed down I presented Ron with his options. He could either fess up or wait while Deputy Johnson went for a search warrant. He said he would confess if we let him keep the meat. He refused, however, to say who his accomplices were. I guess there is honor among thieves—sometimes, especially if there's reason to believe the accomplices might beat up those who inform on them. Ron was fined \$100—big bucks back then—and didn't get to keep the deer. It was the first and only time I ever knew him to pay a fine on time.

Ron's grand finale came two years later. It started with a search warrant for the trailer where he was staying at the time. We had received information that Ron had been killing deer and was keeping the meat in a freezer on his enclosed porch. Subsequent investigation backed up our informant's story, and we found ourselves knocking on Ron's door, armed with the search warrant. Ron wasn't home, but Rick was. Seems he was staying with Ron at the time, so we served the warrant on him. We found parts of two different illegal deer in the freezer, along with some squirrels and rabbits. Citations were filed on both Ron and Rick for possession of the deer, but the case didn't end there (the case never ended with these guys.) Ron decided to ignore his citation. So another warrant was issued for his arrest, and I again had the honor of picking him up. Ron pleaded guilty and was fined \$600, to be paid off at the rate of \$100 a month. Of course, Ron didn't make the payments, so another warrant was issued. I hauled him in again, and his employer agreed to ex-

tract \$50 a week from his wages until the fine was paid in full. Two weeks later, however, Ron was found guilty of some criminal offenses and sentenced to hard time at the Rockview State Correctional Institution. I don't know if the fine is paid yet or not!

The night after we searched Ron's trailer, though, Old Ben, Rick and another man I'll call Jim decided to get a deer or two of their own. With the aid of a spotlight, they shot one along the Mill Creek Road—it's just hard to get away from the old homestead, I guess. They took the deer to Jim's house to skin and quarter. He kept about a fourth, and the rest went to Ben's trailer in Covington.

Now Collene and Ben had been living together for some time and it had always been Collene's job to take care of the meat Ben brought home. This involved a lot of work and mess, and Collene was getting tired of it. It seems she and Ben got in a fight about it this time, so Ben just threw the venison quarters down in the yard and left. Collene obediently took the venison inside and started working on it. But the longer she worked the more mad she got. When I answered the phone that evening she told me she had some illegal deer meat at her place, and wanted me to come and get it. Well, what would any red blooded American game warden do under the circumstances? I got neighboring officer Lynn Keller and we stopped by Collene's place. She had the meat cut up and said she didn't want to see it go to waste. Then she signed a statement implicating Ben and Rick; she didn't know about Jim. She told us Ben had gone to a local bar. We found Ben's car parked outside and with a spot of blood on the rear bumper.

It's amazing how quiet it gets in a bar when two fully uniformed officers walk in looking real serious. I had never met Ben before so I didn't know what he looked like. I told the bartender who we wanted and he pointed to a withered, crusty, little old man sitting at the bar. For some reason I expected a more robust figure. Lynn and I walked down the bar and flanked his stool. "You Ben?" I asked.

"What the (blank) is it to ya?" he growled, without taking his eyes off his beer. I knew we had the right man. I told him we wanted to talk to him outside. "I'll

be out when I finish my beer," he snarled.

We waited by his car and before long he sauntered out. Confronted with the story and even the bag of meat, Ben promptly denied everything. I asked him to open his trunk, and after some haggling he did, still denying having anything to do with an illegal deer. In the trunk was some blood and deer hair. Lynn picked up a couple of hairs, held them up and asked Ben what they were. "A deer hair," Ben snorted. We took some blood and hair samples, and enough information to file a citation. Then we went looking for Rick, but he was nowhere to be found. A few days later Ben called to say he wanted to settle on a field receipt. When he stopped by the house to pay the fine he was very polite but looked battered up. Then, before he left, he told me where to find Rick.

Later that day I found Rick. He had a large gash on his head, and dried blood was smeared down his face and shirt. He was expecting me it seems. He said his dad had stopped by a couple of days earlier and demanded \$135 to pay his fine or he would turn him in. They got into a fight, and his dad picked up a big silo wrench and smacked him alongside the head with it. Rick then threw the old man through a window. Well, Rick was in a talkative mood by now. He told us about Jim. We hadn't known about Jim before. Seems Ben had demanded \$75 from Jim, too. Jim paid him the money to keep him quiet. Rick pleaded guilty all right and was placed on time payments, whereby he promptly left the state and forgot about the payments. We picked him up months later, when he came back, and he was placed in the county jail. He promised to pay regularly and after a few days was released. He then fled the state again.

Meanwhile, Jim was contacted. From him we learned two deer had been killed that night, but we were grateful just to get one paid for.

Well, the family is still there. Every wildlife officer who ever went on patrol could tell a similar story. I offer it here simply as a candid peek into a particular lifestyle that conservation officers must frequently deal with. The names in this story have, of course, been changed. Lumped together, we call them hoofties, and they are one big reason we're still in business.



# Thornapples



Chuck Fergus

**T**HE MOST IMPORTANT item in the deer hunter's kit is the rifle, correct? No. It is the coat. The boots. The raingear. The hat.

If the hunter can keep reasonably comfortable, he or she will be able to focus on the task at hand: locating a deer before it sees, hears, or smells the human presence. Good clothing and footwear—quiet, unrestricting, responsive to changing weather conditions and temperatures—lets the hunter move unobtrusively through his surroundings, and better enjoy the days afield.

Few of us are wealthy enough to simply page through the sporting goods catalogs and order the best of everything (nor is it immediately apparent just what the best of everything looks like). Over the years we accumulate a collection of outdoor apparel that seems to do the job. It pays to consider each purchase carefully. I am still enjoying items bought ten years ago, and replacing others that haven't lived up to expectations.

So, from the soles up, a look at this particular deer hunter's wardrobe.

**Footwear.** My feet always get cold when I stand motionless for any length of time—and standing motionless is what I do more often, hunting deer, than anything else. So my boots need to be warm, to forestall that moment when cold feet goad me into moving again. Also, the boots must shed water and

provide traction on steep or muddy terrain.

I rely on two pairs. Both have leather uppers and rubber bottoms. The first pair I use when I plan to still hunt (that is, to walk slowly through the woods, stopping often, in search of a deer: probably three-quarters of my hunting is done in this fashion). This first pair of boots has uninsulated uppers and insulated bottoms; the sole is the deep-lug Vibram type. The boot is quiet and sure-footed. I wear a fleece insole inside of it, and good thick socks.

The second pair is a "cold weather boot," an oversize shoe containing insulating  $\frac{3}{8}$ -inch wool felt inner liner—a boot inside a boot. The soles are a low profile chain-link pattern (I wish they were the lug type), so if I'm faced with a lot of ups and downs on slick hillsides I don't wear these boots. I use them when sitting for long periods, as on opening day or the first Saturday, or if the weather is bitter.

The variety of boots available for deer hunting is mind-boggling. Boots are made with a host of space-age fabrics and insulating materials, with soles of all styles, special insoles, lacing systems, and waterproof liner socks. Last season I spotted a pair in a catalog that looked ideal: waterproof, insulated, with an additional felt liner and lug soles. Then I spotted the price (\$125) and the weight (5 lbs., 10 oz., the pair).





For me, when a boot weighs over two pounds, it's a concrete block. Many catalogs do not list boot weights; personally, I would never buy footwear without knowing the weight in advance.

Good socks are almost as important as the right boots. I wear thin polypropylene liner socks that transfer perspiration to the outer socks, keeping my feet from feeling sweaty. I used to swear by heavy wool outer socks, and I still think wool is warmer than the synthetics, but I'm not much good at darning and I go through wool heels at a terrific rate, so now I opt for a thick polyester sock that wears better than wool and seems warm enough. (Though my feet are *never* warm enough. Ditto my hands. More on handwear later.)

*Underwear.* Depends on the trousers I'm wearing. Most of the time I wear two pairs of longjohns, a polypropylene fishnet one next to my skin, then a light woolen garment over it. Over the underwear, a pair of tightly woven wool trousers: Air Force surplus, bought in an Army-Navy store for ten bucks. For really cold days I switch to insulated wool trousers, in red-and-black plaid, with a nylon lining and elasticized ankle cuffs; under these great bulky pants I wear polypropylene longjohns.

Above the waist I like a long-sleeved polypropylene undershirt. I own three because I tend to stink them up and prefer to wear a fresh one daily.

*Shirt, suspenders, vest.* For still hunting, when I'll be moving at least a little, I wear a medium-weight wool shirt. Suspenders (red ones, nice but not as dressy as my friend Jeff Swabb's, which

are rainbow-colored) hold up my trousers, cut fairly loose; pants are more comfortable and insulate better when they don't fit too snugly. (I also wear a belt, with a small sheath knife and a leather case for spare cartridges.) Over the wool shirt, a light wool vest. I favor a black, rather severe-looking vest that Woolrich sells for around \$25. The vest keeps my torso warm without binding my shoulders and arms.

*Overcoat.* My Filson Mackinaw Cruiser is my pride and joy. When the C. C. Filson Company, of Seattle, brought the coat out around the turn of the century, it cost \$5; now you can have one for nearly 30 times that amount. The Cruiser was used by gold prospectors in the Klondike and by timber cruisers (hence the name) in the Pacific Northwest. It has four front pockets, and a large back pocket formed between the two layers of wool. The U.S. Forest Service issues the coat to its rangers, in an official-looking shade of green (my choice), but it also can be had in red-and-black plaid. Cut full, as if for a man with a generous belly, the Cruiser accommodates my wool shirt and vest and doesn't bind me under the arms, so I can still handle a rifle.

Beyond any doubt, I prefer a wool coat for still hunting. Wool is quiet, it blocks the wind, it keeps you warm (and smells good) even when it gets a little wet. To comfort the neck, the Cruiser's collar turns up in back, although not as soaringly as the better-known Woolrich coat's collar. I usually wear a light woolen muffler in the morning, then take it off and open the top few buttons if the weather warms up.

On days when I feel like staying put, sitting in a tree stand or on a stump and watching a deer trail, I switch to a down-filled coat. Although this coat is warm, its nylon covering is noisy, so it is not as useful as wool for still hunting. It also has the potential for problems if the weather dampens: down clumps up when wet, losing its insulating properties.

I've seen advertisements for wool coats with body-warming insulation



sandwiching a layer of Gore-Tex, which is supposed to lock out rain while “breathing” and allowing body perspiration to diffuse out. If they work, these coats certainly would be effective, although I suspect they don’t perform nearly as well as the catalogs let on. Friends have told me they sweat inside their Gore-Tex coats almost as much as inside totally rubberized garments.

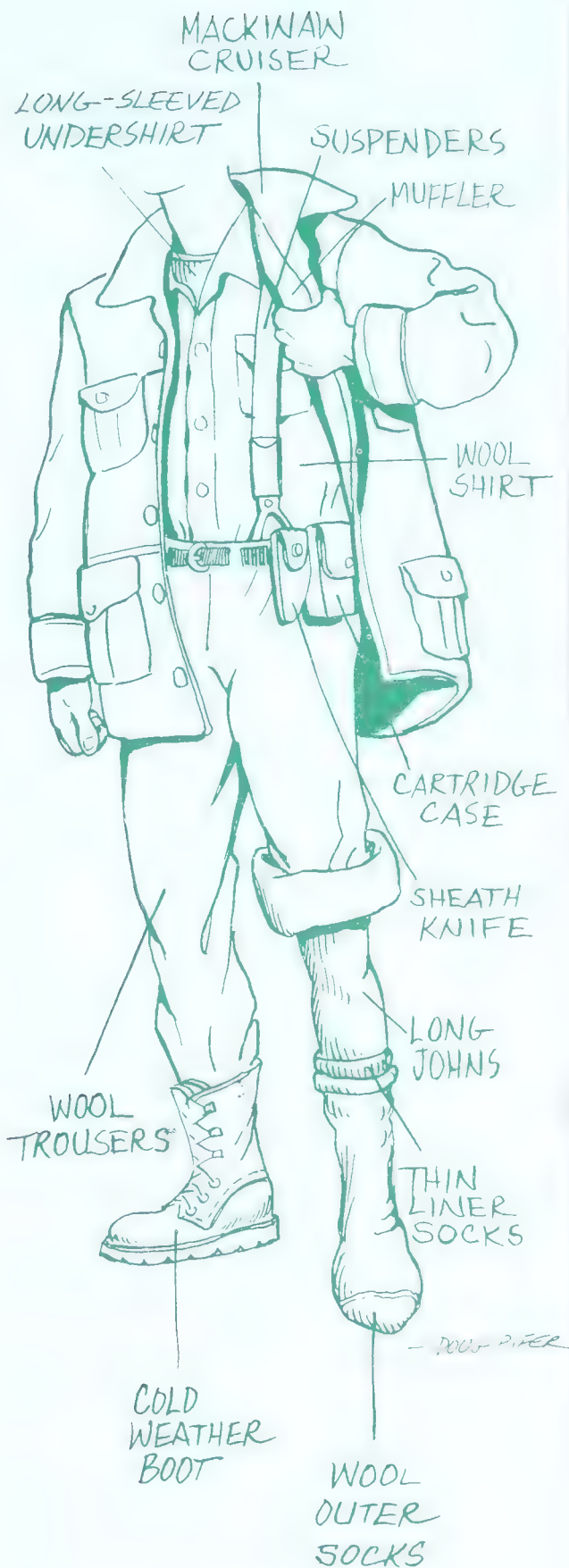
**Raingear.** Two years ago I bought one of those deep-green, oiled-cotton coats from England. I paid a hundred dollars for mine (of the Beaverwax brand), and thought it a bargain (the coat had been brought down from Canada where prices were lower). Similar coats by Barbour run \$190 and up. But the oiled-cotton garments are worth every penny. They are significantly quieter than nylon raingear, they give yeoman service in the upland covers, and they really are waterproof, if you remember to reapply the wax dressing every so often. The coats breathe, so you don’t get sweated up inside. I like mine so much I bought a pair of lightweight rain pants to match.

If I know the day will bring rain, I go with the waxed cotton. If it only threatens, I wear my Filson and carry a set of lightweight nylon raingear.

**Hats.** Plural. I have a passel of them. A waxed cotton one for rainy days, worn with an added fluorescent orange band to fulfill Game Law requirements. An orange down-filled cap for stump-sitting, a billed, insulated cap for still-hunting:

**Handwear.** I have never found perfect handwear for deer hunting, and wonder if it even exists: for gloves to be warm, it seems they must be bulky, and bulky hands don’t operate safeties and triggers effectively.

All too often, my hands ache in the December cold. Mittens are warmer than gloves, and I have a great pair of mittens (deerskin palms with wool backs), but of course I’d need to take them off to use a gun—and for still-hunting, when a quick shot is always a possibility, mittens are next to useless, even the ones with openings in the palm where you can stick your trigger finger



out. A friend who is a good hunter wears thin brown cotton jersey gloves; he moves very slowly, and keeps his rifle slung over his shoulder and his hands in his pockets, banking on seeing a deer well before it notices him.

I have settled, by default, on thin woolen gloves with a leather gripping band across the palm and a nylon-covered trigger finger. The catalogs offer a range of nylon-faced, insulated gloves, and I may well try a pair (in orange, of course) this season; the main disadvantage no doubt will be the nylon scraping against twigs, laurel leaves, tree bark, perhaps even my own coat.

**Vest.** One last clothing item is absolutely essential: an orange outer vest. Orange, because I want to be seen, and because orange is required by law to let other hunters know emphatically that I'm in the woods. When rain doesn't look likely, I wear a Duxback hunter's vest with an ample front-loading game pouch and two large front pockets. Into pouch and pockets go lunch, drag rope, whistle, matches (including a "metal match" for starting fires in bad weather), compass and maps, toilet paper in a

plastic bag, and a square of sheepskin (laid on stump or log, it makes a warm dry seat). I'd rather carry these necessities in a vest than in a pack, because packs tend to catch on branches and brush, and also bind the shoulders, making it harder to raise and swing a gun.

On rainy days I opt for a simpler, lighter vest that won't be as heavy when it gets wet. I either use a pack, or stow necessities in the pockets of my Cruiser or waxed-cotton coat.

Because weather conditions change, clothing needs change—from day to day, hour to hour, minute to minute. The idea is to keep your options open. Beneath your outer garment, dress in layers so that the top layer can be shucked if necessary; wear clothing with buttons rather than pullover styles, so that fronts can be left open to spill unwanted body heat.

There is no perfect hunting outfit. The idea is to keep as comfortable as possible without sacrificing stealth, traction, and maneuverability. Perhaps the key item in the deer hunter's wardrobe is a sturdy cloak of stoicism.

## ***GAME*cooking Tips**

### **Limed Doves**

When children move away from home, one of the things they miss most is mom's home cooking. When our kids got to that stage, I haunted flea markets and garage sales for small baking dishes that were in good condition that could be sterilized. Then, whenever I made something the kids would enjoy, I fixed a second batch and filled a casserole dish or bowl with something such as the recipe included here. After taping the recipe to the top, and freezing, my loving care package was ready to send away with the next child home for a visit. That gave them a dish to add to their cupboards as well as another one of mom's recipes for their file.

- 1 cup light oil
- 1 cup fresh lime juice
- zest of 2 limes

- 3 cloves garlic, minced
- 1 teaspoon cilantro
- $\frac{1}{2}$  teaspoon pepper
- 6–8 doves, split in half

Mix oil, lime juice, zest, garlic, and seasonings. Shake or beat to combine well. Place cleaned and split doves in a sealable plastic bag and pour marinade over. Refrigerate overnight or up to 24 hours. Roast over coals or on grill for about 45 minutes, turning and basting frequently. Birds are cooked when leg moves freely and juices run clear. —Serves 4.

—FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY





**NUMBER 1.** This appears to be a perfect opportunity to add another rack to the living room wall, but is it? The deer's leg is covering the heart area, and the shoulder bones cover most of the lungs.

**It's not always easy . . .**

## *Selecting a Shot*

**By Keith C. Schuyler**

**Y**OU'VE WAITED maybe five minutes for a deer to show. Or perhaps you have waited five hours while fighting cramps, drowsiness, late mosquitoes or an unseasonable flip-flop of the thermometer. You have gone over your budget, how to deal with Russia, Central America and the Far East, and whether braces are needed more for your kid's teeth or your own back. About the time you are certain that noisy chipmunk will burst his cheeks with the next bite, it happens — nature calls.

This is just one of the contingencies for which we are sometimes, and for no reason other than improper planning, caught short. On the other hand, the deer we seek don't carry anything other than their own scent, natural camouflage and a propensity for doing the

wrong thing at the right time. Or vice versa, depending upon whether we view the situation from the deer's viewpoint or the dummy who stayed up too late and drank too much coffee after a hearty breakfast.

### **Benefit of the Doubt**

But let's give ourselves the benefit of the doubt, that fine line between complete personal preparedness and what the animal has in plan for us. Is there a person alive, who has taken this bow-hunting business seriously for a number of years, who hasn't spent literally hours wondering why he or she blew a chance that had venison dinner written all over it? In by far the most instances, opportunities are not blown because we are not equipped physically or lack adequate



**NUMBER 2.** Here we have a near perfect situation. The buck couldn't be in a better position. Only one thing is wrong—behind the buck's vital area is another deer.

equipment or reasonable know-how. It is because no two shooting situations are exactly alike.

There is simply no way to anticipate everything that might turn a sure thing into a hideous embarrassment. Countless factors can send an arrow into the dirt or a stump. Worse, the flight of the missile might cause an unintended wound.

Acknowledging that latter possibility separates any attempt at levity in these paragraphs from that grim reality. Proper preparations and good intentions are insufficient insurance against the vagaries of fate. There are times when we do everything right and still stumble, but we should continually strive to eliminate those factors that can turn good intentions into less than fond memories.

Examples of situations that can help us learn to better utilize our judgment are provided in the accompanying photographs. To that end, let's take a look at each of these examples.

*Number 1.* This appears to be a perfect opportunity to add another rack to the living room wall. And it is, almost. However, the buck's leg completely covers the heart area, and his shoulder bones cover the most vital part of the lung section. True, a good hit is possible. But in another instant, at his next step, that leg will move forward, better exposing the vital area to an arrow. A small thing, perhaps, but such small details may mean the difference between having the deer drop within sight and a protracted search for it after a proper wait of an hour or so.

In this situation, the animal shows no sign of suspicion. It most likely will take at least one more step, improving the odds of a quick kill. We all know, of course, that it *could* bolt within a fraction of a second. But the archer has everything going for him at this moment. Isn't it worth another second to be as sure as possible?

*Number 2.* Here we have a near perfect situation. That buck couldn't be in a better position for a quick and positive kill. Only one thing is wrong. Behind the vital area is another deer. This could be distracting and cause a poor hit on the target animal. Most misses tend to be from shooting too high, and in this instance, that could be a nasty consequence.





**NUMBER 3.** Here's another near perfect shooting situation, but with one little exception. The limb of a small dead tree is pointing right at the deer's heart area. It might deflect your shot or else distract you enough to cause a miss.

The advice here is to wait until the buck is clear of the other animal. This fine buck shows no sign of being the least bit alarmed. It should *really* be a perfect situation in just two forward steps. Again, a lot can happen in a few seconds, and that other deer, which is almost facing the camera, might complicate the situation. But if the worst happens, there will be other days, other deer.

*Number 3.* If there's ever a perfect shooting situation for an archer, this might be it—with one little exception. If you look closely, you will see a limb of a small dead tree pointing almost right at the deer's heart area. Fine, you might say, it provides a nearly perfect aiming spot. Just a couple of inches right to clear that shoulder and you can start filling out your deer tag. Well, maybe. A question arises only if you can't completely ignore that dead limb. Otherwise, you just might hit it and deflect the broadhead for a miss or a bad hit. Or it might distract you enough to make a miss out of a sure thing.

Such things happen. Some years ago I had what seemed to be a fine stand. It was a bit late in the afternoon, although there was plenty of legal time remaining. After I got all set to cover a runway 20 yards distant, I noticed a dead sapling or branch just short of the deer trail. Moving it meant carrying human scent to the spot and possibly being seen by a deer headed that way. There was space for an animal to stop either side of the stick, so I decided to stay put. You guessed it, a deer appeared, and it stopped in just the position where the

**NUMBER 4.** Here's the one you've been waiting for all your bowhunting life. But he has you spotted, so you must make a quick decision. In this instance, you'd probably be better off waiting him out.



stick covered its vitals. Shooting instinctive with a recurve bow, my decision was to aim right at the stick, *knowing* that I couldn't actually hit it at that distance. Just an inch, up or down, would place the arrow right were it belonged. I hit the stick. The arrow ricocheted harmlessly over the animal.

But for Number 3, go ahead and shoot. Next time, though, get rid of that little dead tree beforehand.

*Number 4.* Brother! There is the one you have been waiting for all your





**NUMBER 5.** Are you a trophy hunter or out to fill freezer space? The doe in front is as sure a thing as you're likely to get all season, but off to the left is a trophy for the wall. What would you do?

bowhunting life. He has you spotted, so you have to make a quick decision.

You're going to shoot?! Where are you going to aim? That tree nearly covers his vital area. You have only the shoulder and the neck, neither a good target for an archer, and you run the real risk of merely wounding a magnificent animal.

If you are a real, died-in-the-wool sportsman, you'll wait him out, hoping he gives you a better shot—now, or at a later time. It is a tough decision, but you will have to live with the result, one way or the other.

*Number 5.* Oh boy! At this moment you must decide if you are a trophy hunter or need to fill freezer space. Right in front of you is a big fat doe presenting a shot that is as close to a sure thing as you are going to get all season. But, moving into the picture from the left, is a trophy for the wall. However, he has transferred his interest from those does to you. My guess is that you won't get a decent shot at him.

You are on your own. And that buck may do something stupid and provide a good shot. But right now both the angle and that fawn make any shooting attempt a bad decision. According to the leaves on those trees, there is a lot of the season left . . .

These photographs cover but a handful of situations that present themselves when hunting with the bow and arrow. How the archer responds to these and many others will be based somewhat on expertise with the bow and arrow, and such variables as the time of day and whether the plan is to hunt later, in the firearm season.

And even when everything appears right, something can go wrong. Two shots I took at the same buck on the final day of last year's regular archery season resulted in bad misses to the left. My sight had become loose.

But, for all of us, selecting a shot involves much more than just seeing deer within our bow range.

## Thoughts While Walking

*The easiest person to deceive is one's own self.*

—Edward Bulwer-Lytton



# Handgun

## Reloading

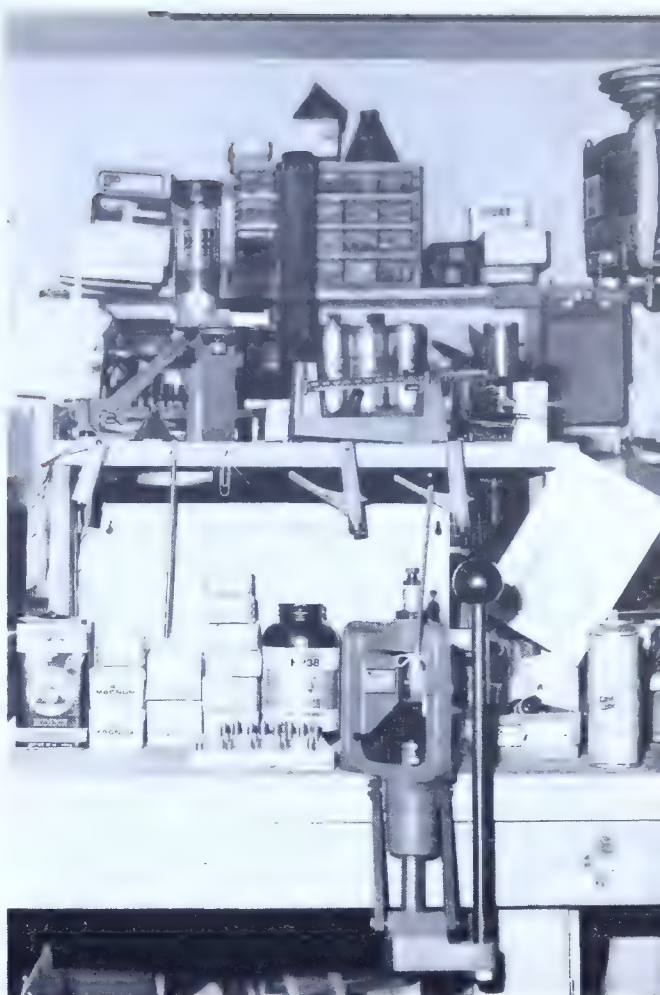
By Don Lewis

Photos by Helen Lewis

**"IS IT DIFFICULT** to reload handgun shells?" a middle-aged man asked at a gun seminar. "I've heard there is quite a difference between rifle and handgun ammo when it comes to reloading."

I've been asked that question enough times to warrant some discussion on the subject. I could give a short answer by simply saying that reloading a handgun cartridge is just the same as reloading a rifle case. Reloading boils down to installing a primer, powder and bullet in each type of case. The fact that home reloading was first introduced for rifle cartridges is probably the main reason many handloaders are suspicious of tackling handgun cases. While the reloading procedures are similar, handgun reloading requires several extra steps.

Handloaders working only with rifle cases really have just two types of primers to contend with—large and small, whether they are conventional or magnum types. The same holds true for handgunners, but handgun primers contain less explosive than rifle primers. Also, handgun primers are thinner and softer than rifle primers because of the softer blow of a handgun's hammer. Therefore, never use handgun primers in rifle cases or vice versa. Several rifle cartridges, such as the 22 Hornet, 221 Remington and the 30-30, are used in single shot handguns, such as the Thompson Contender and Remington's XP100. Rifle primers are used for those cartridges.



**RELOADING** handgun cartridges is similar to reloading rifle rounds. It boils down to installing a primer, powder and bullet in each case. The only difference is that handgun reloading requires several extra steps.

All small primers, be they rifle or handgun, have a diameter of .175-inch, and large primers have a diameter of .210. Rifle and handgun primers may look alike, but they aren't.

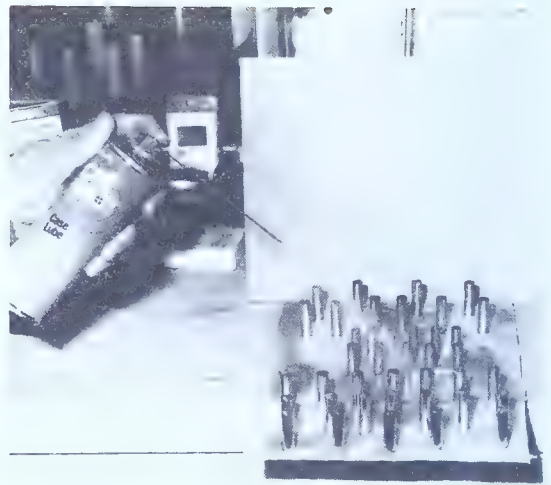
There are two types of primers—the American Boxer and the Berdan, which is a foreign design. Rifle cartridges and many handgun cartridges made in this country use only the Boxer-type primers. The Boxer primer is a self-contained unit that incorporates a priming mixture in a small cup and an internal anvil. When struck by the firing pin of the firearm, the anvil crushes the priming compound, causing it to ignite.

Cartridge cases designed for the Berdan primer have two flashholes and a



built-in anvil in the primer pocket. The Berdan primer does not contain an anvil. I'm mentioning this because some handgun cartridges made in America use Berdan-type primer pockets and cannot be reloaded with conventional dies. A special decapping tool is required to remove Berdan primers. CCI's Blazer handgun cases are made from aluminium and have Berdan-type primers. In fact, the Blazer's head is stamped with the letters NR (Not Reloadable). I'm told this type of ammo can be manufactured at a significant savings, which is an attraction for shooters who don't reload. It's wise to check all cases before reloading because the single decapping pin used in conventional reloading dies will break if a Berdan case is used.

The first step in reloading is to resize the case back to its original dimensions. Before this is done, though, all cases should be wiped free of grit and powder residue. Also, the cases must be lubed slightly when using a conventional re-



**THE EXPANDER DIE**, left, enlarges the front part of the case and puts a slight "bell" in the case mouth so it will accept a bullet. When using conventional dies, cases should be cleaned and lightly lubed, above.

sizing die. Some handgun resizing dies have a carbide insert for straightwall cases and those such as the 9mm Parabellum, which has a very slight taper from back to front. It is not necessary to lube cases when using a carbide resizing die. Tungsten carbide is very hard and also brittle. When adjusting the carbide resizing die in the reloading press, do not allow the shell holder to touch the bottom of the die, as is the normal method with a conventional resizing die. Any pressure on the bottom of a carbide resizing die might cause the carbon insert to crack. Make certain the decapping pin is run down through the case far enough to push out the old, spent primer.

Normally, the primer is knocked out when the case is resized. Some handgun dies use the first die as a resizer only. It's the second die (expanding die) that de-primers and expands. There's no real difference as the end result is the same.

The resizing operation reduces the







**THE CASE** above requires a Berdan primer—note the two flash holes—so it cannot be reloaded with conventional dies. For consistent results, a reloader should routinely check cartridge lengths.



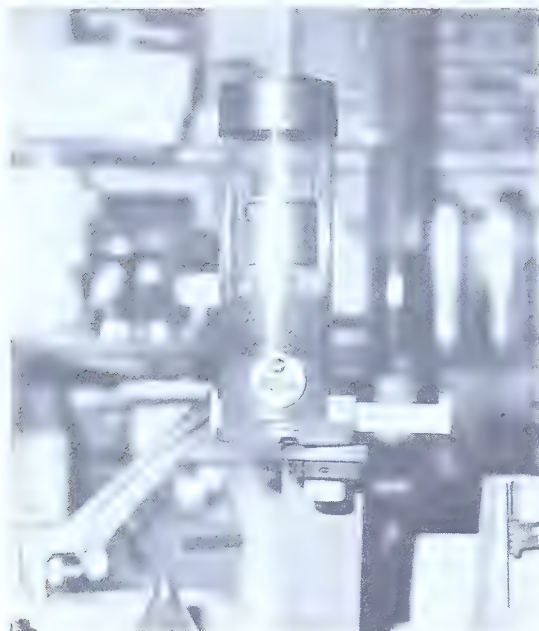
outside and inside diameters of a handgun case. The expanding die (usually the second die) expands the inside diameter of the first half inch of the case. The paramount purpose of the expander is to enlarge the front part of the case so that it's a few thousandths of an inch smaller than the bullet. It also puts a slight "bell" in the case mouth to accept the bullet without a lot of binding. The expander plug has an enlarged tapered surface at its top to bell the mouth. The expander plug should go just deep enough to put a slight flare in the case mouth when the press handle is fully down. This is a trial and error operation, and the depth and size of the flare is up to the individual. Excessive flaring, however, will crack the mouth of the case.

When the case is decapped a new primer should be installed. I believe primer pockets should be cleaned periodically. The primer should rest firmly on the bottom of the primer pocket to assure positive ignition. If a primer is not seated firmly or is seated on burned residue, a misfire is possible. Seating a primer tightly against the bottom of the primer pocket also plants the tiny cake of priming compound firmly against the anvil. In case some may think seating a

primer is an act of strength, it's just as unwise to use excessive pressure. Develop a smooth even rhythm with whatever type of tool is being used. When a primer is properly seated, it will be several thousandths of an inch below the level of the shell head. This prevents a protruding firing pin from scraping across it.

At this point, the beginning reloader should select a moderate load from a relatively new reloading manual. The reason I suggest using one of the newer manuals is because some powders and primers have been changed during the last decade or two. I use manuals from the 1950s and 60s for reference only. The beginning handloader should stay clear of loads suggested by other shooters, unless the load is taken from a new manual.

When I started to reload in the early 1950s every powder charge had to be weighed. That's still okay, but the powder charges thrown by today's top quality powder measures are very accurate. Some handgun powder measures use fixed rotors or bushings, which are usually made from brass or steel. The rotor has a cavity drilled in it that fills with powder from the measure's hopper



**NOTE SLIDE on this Hornady Pistol Powder measure that uses various bushings for throwing consistent powder charges. Lewis screws identification tag on because stickers are liable to fall off.**

when turned up and drops the charge into the case when the rotor is turned down. Bushings are usually fit into a sliding charge bar that works horizontally. It's a simple matter to change bushings for a different powder charge. Each manufacturer provides a chart that lists a number of popular handgun powders and shows how much of each powder a certain numbered rotor or bushing will hold.

### Double Check

I run a double check on fixed rotors and bushings. For example, let's use Hornady's Pistol Powder Measure that uses bushings in a sliding charge bar. The manufacturer's chart shows that a number 4 bushing will drop 2.7 grains of DuPont 700X, 3.4 grains of Hercules Unique or 5.2 grains of Hodgdon HS6, to name a few. I happened to have Hodgdon HS6 in a Hornady Pistol measure, and I dropped 10 consecutive charges in the large powder pan of my RCBS Model 304 scale. If the bushing was dropping the correct weight, ten charges should equal 52 grains of HS6. I ran the test twice, and each time came up with 51½ grains. That means in ten throws, I lost a half grain of HS6, and that's not bad. Also, when I weighed the 10 charges on several other scales, I was a tenth-grain or two above and below the 51½-grains,

which indicates there are slight differences among scales.

Many handgun handloaders use lead bullets. It's a little more difficult to seat a pure lead bullet than a jacketed one. With lead, the case mouth must be flared sufficiently to accept the bullet. It's easy to damage a lead bullet during the seating process.

I don't want to get too involved in the actual seating process because it comes right down to a trial and error affair. You will learn far more by doing than by reading. However, I suggest following the instructions in a reloading manual.

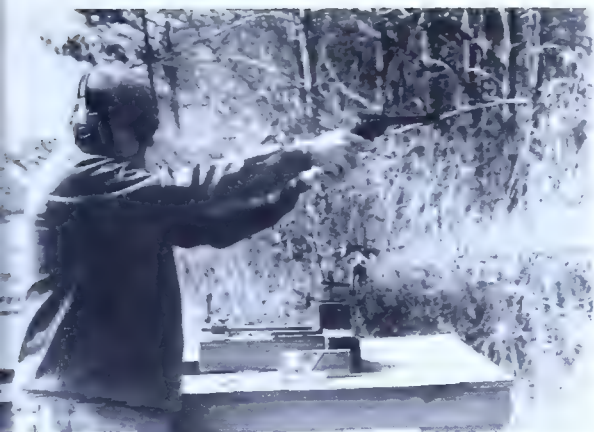
The last step is crimping the bullet. If you want a lot of rolled crimp, the bullet will have to have a cannelure or groove to accept it. The crimp keeps the bullets in the shells in the cylinder or magazine from moving when the gun recoils. There are plenty of arguments both ways on crimping. When I operated a reloading shop, I always crimped handgun ammo and cartridges for rifles that had tubular magazines.

Crimping is done by adjusting the die to roll the crimp into the cannelure at the last moment. There are special dies that do nothing but crimp. It really is a personal matter.

Because handguns are often fired more than rifles, home reloading is almost mandatory for handgun enthusiasts. In fact, casting your own bullets for handgun shooting really saves money. One handgunner who burns a lot of homemade fodder claims his total cost per round is only what the powder and primer cost. For bullets he uses everything from discarded wheel weights to junk yard lead. He then uses a bullet trap to save the lead, which is then re-melted and cast into new bullets.

Casting and reloading cast bullets is an article in itself, and I will cover it in the future. Still, many new converts to handgun reloading take up casting at the same time. Here's a word of advice





**HANDGUNNERS** consume far more ammo than riflemen, so reloading is oftentimes the only practical way for a shooter to obtain the amount of ammo it takes to become proficient with a handgun.

on how to handle hot lead. There is a constant danger of getting severely burned. Another health hazard is the risk of ingesting lead into the body. If possible, cast outside or in a well ventilated area, wear a long-sleeved shirt, leather gloves and shoes or boots that cover the feet and ankles. Make certain the pant legs are over the shoes or boots. Wear glasses at all times, and keep children away from the casting area.

As I mentioned earlier, handgunners consume far more ammo than rifle shooters. Few rifle buffs will fire 50 to

100 rounds in one practice session, but handgunners do it on a regular basis, especially if they reload. It takes a lot of shooting to maintain a high level of proficiency with a handgun. Initial practice sessions should be with low velocity handloads. After the shooting techniques are mastered, a person should then gradually work up to full power hunting loads. Handgun reloading allows you to have loads for almost any purpose, and eventually you will come up with a hunting load that works in your particular gun as well, if not better, than a factory round.

If you want to bring new life back into your handgunning, start rolling your own fodder. In less than six months, you'll wonder why you waited so long to get into such a fascinating hobby. That's really what handgun reloading is—believe me.

## GAME NEWS

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# *In the wind*

bob mitchell



Accidental firearm fatalities have declined more than 50 percent over the past two decades, according to the National Shooting Sports Foundation. The NSSF recently compiled information on accidents in the home, public places, and among hunters, from the National Safety Council, the National Electronic Injury Surveillance System, and from the Hunter Education Association. Furthermore, of nine accident categories measured, firearms accounted for fewer fatal accidents than any other category except poisoning by gases and vapors. In relation to firearm fatalities, those for drowning were four times as great; falls, eight times; and motor vehicles, 35 times. In 1987, the most recent statistics available, there were 1400 fatal firearms-related accidents. Of those, 700 took place in homes and 600 in public places.

**The U.S. Fish and Wildlife Service recently adopted a regulation requiring state governments to give interest income earned from fishing and hunting license revenues to their fish and wildlife agencies. According to the Wildlife Management Institute, this ruling will increase, nationwide, state fish and wildlife budgets by more than \$22 million a year. States that do not comply would jeopardize future receipts of federal aid funds.**

In an effort to reestablish river otters in western Virginia, 17 otters (9 males and 8 females) were obtained from Louisiana and released in the Cowpasture River. If the procedure proves successful, other otters will be taken from coastal Virginia, where the furbearers are still thriving, and placed in mountainous areas of the state.

Recognizing them as valuable game animals, the Michigan Department of Natural Resources has established seasons and bag limits for coyotes. Also, for the first time in about ten years, there will be a trapping season for badgers this year in Michigan.

According to the Florida Game and Fresh Water Fish Commission, there were 399 nesting pairs of bald eagles in the state last year. Of those, 276 nested successfully and produced 448 young.

**Last year Ducks Unlimited raised \$59.3 million, bringing to nearly one half billion dollars the total raised by DU since it was founded 52 years ago. Over that time membership in the conservation group has grown to 550,000 and, most importantly, 5 million acres of wetland habitat has been enhanced or restored and more than 4000 projects have been completed in the United States, Canada and Mexico.**

Since 1984, 63 peregrine falcons have been raised and released in North Carolina, and indications are that the effort to reestablish the endangered species is working. Three nesting pairs incubating eggs were found last spring, and four other pairs were located.

Indications are that the grizzly bear population in Yellowstone National Park is increasing. Their behavior, large home range, low population densities and other factors make it difficult to get an actual count of grizzlies. Instead, researchers monitor the population by keeping track of the number of females seen with cubs, the number of sightings by the public, the number of grizzlies that die, and by conducting systematic censuses. Furthermore, because females average three years between litters and that a large proportion of females had young three years ago, a large cub crop was expected this year.

## ANSWERS:

2. At all times
4. Binoculars
7. Sight
8. Whistle, cough or make a noise to alert him to your presence
9. Must be accompanied by an adult





*The Wingless Crow*, by Chuck Fergus, is a collection of thirty-three Thornapples columns which have appeared in *GAME NEWS*. The nearly 200 pages of entertaining reading will appeal to Fergus fans as they reread these selected essays as well as to those who've yet to discover the joys of Thornapples. This top quality hardcover books costs \$10, delivered, and can be ordered from the Pennsylvania Game Commission, Dept AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797.



**Pennsylvania Big Game Records, 1965-1986,** features the state's official white-tailed deer and black bear records, plus dozens of stories and hundreds of photos related to the trophy hunts. Order this 237-page hardcover book from the Pennsylvania Game Commission, Dept. AR., 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Price is \$10, delivered.



# PENNSYLVANIA GAME NEWS

OCTOBER 1989

ONE DOLLAR





***Last Glance***, by Jack Paluh, is the seventh limited edition fine art print available through the Game Commission's Working Together for Wildlife program. As with previous editions, *Last Glance* is limited to 600 signed and numbered prints. Image size is approximately 15 x 22½ inches, printed on acid-free 100 percent rag paper. Price is \$125, delivered; framed prints are an additional \$97.50. Limited numbers of 1986, 1987 and 1988 prints are still available. Order from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.



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**COVER PAINTING BY BOB SOPCHICK**  
(Cover Story on Page 24)

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## The Shooter's Corner

ALMOST EXACTLY a quarter-century ago, out in the southwestern quadrant of the state, a dark-haired 43-year-old shooter sat down at his old manual typewriter and cranked out an article on the 22 WMR cartridge. It was called "A Plea for a Friend," and I mention it here because it was the first GAME NEWS gun column to carry "The Shooter's Corner" logo and the byline of Don Lewis. At that time, few Keystone State gunners had ever heard of Don. But now, after hundreds of GAME NEWS gun columns, plus numerous contributions to other publications such as Stoeger's *Shooter's Bible*, *Gun Digest*, and a host of gun magazines, most readers would agree that he is one of the country's top gunwriters.

As a natural consequence of all this, it seemed only reasonable that Don should write a gun book. He and I had talked about this many times, but there always was some reason not to get started. However, a few years ago we realized it was time to face up to the inevitable—"bite the bullet" seems an appropriate term. It took awhile to get the preliminaries out of the way—project approval, budgeting, time allotment, etc.—but eventually there was nothing left to do but get Don seated in front of a word processor (his Remington "Noiseless" was as long gone as the darkness in his hair) and hitting the keys. "How many words do you want?" he asked. (That's inevitably the professional writer's second question, coming right after "When do I get paid?") "Aim for 150,000," I said. (It's easy to set such lofty goals when you're the editor, not the writer.) That was approximately two years ago, and since then Don has spent most of his time writing. All of the copy is new, not pickups of previously published columns. The result is impressive—a 449-page hardcover book of 220,000 words (he didn't even pause momentarily at 150,000) and 100-plus photos.

In the beginning, Don starts by discussing the invention of gunpowder and its spread around the world; various types of ignition such as matchlock, wheellock, flintlock and percussion, as well as today's self-contained primer system; the progression from the earliest guns to modern lever, pump, bolt and autoloading actions, and how these designs function. He gives thoughtful insights on projectiles of different designs, barrels and stock, metallic sights, scopes and mounts, rimfire, varmint and big game rifles. He also gives extensive information on shotguns—their gauges, chokes, stock fit and pointing—with practical suggestions as to shot sizes, rifled slugs and buck shot. There's also plenty of material on blackpowder guns, handguns, handloading . . . even instructions on constructing benchrests.

All material is presented in a clear, semi-technical style, to be helpful to the beginner and yet fully practical to the mass of sportsmen who have a strong interest in guns and shooting. Don makes everything highly readable by recounting personal experiences which relate to every phase of the book—and he writes of the misses as well as the hits. *The Shooter's Corner* (what else could we call it?) will add many new fans to Don Lewis's legion of followers. It should be available in late October from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Price \$15 delivered. —Bob Bell





I HAD TAKEN no more than a couple steps when two large gobblers, looking like figures from a Ned Smith painting, lifted out of a thicket of striped maples only 30 yards away. With my gun slung over my shoulder, I could only watch them fly away.

## ***A Special Evening After Work***

**By Richard Tate**

I LOVE TO hunt turkeys, both spring gobblers and autumn flocks. I usually scout diligently before each season to locate spots that might be more productive than others at a particular time. Last fall, however, I had gotten hung up on a couple of lunker trout, and I managed to put in only four evenings and one Saturday of scouting prior to the opening of turkey season.

These scouting sessions were not very helpful. Not once did I run into turkeys, and only one time did I find any sign of birds in the vicinity. That evening Dad and I found a large area that had been torn up by a foraging flock. But the scratching appeared old, and a week later we found it had been blanketed by fallen leaves. Meanwhile, Dad was scouting as often as he could on his own,

but he couldn't come up with anything exciting. So, when opening day rolled around, we were going to be hunting blind.

We decided to try an area that, despite the lack of sign, usually harbors turkeys and where we have enjoyed some success. The day was a good one for hunting: sunny and cold. But it was not a good day for locating turkeys. Dad hunted a variety of knobs and hollows during the day without seeing a bird.

"I ran into a pile of deer, though," he confided that evening. "I saw four nice bucks. I even saw a few squirrels. But I think the turkeys have left the country."

My tale of woe was much like Dad's: I hunted hard, covering miles of territory. I saw a couple of dozen deer, three of which were rack bucks, and several

squirrels and grouse. But I couldn't get the drop on a turkey, though a pair of large gobblers made a monkey out of me about an hour after I ran into a group of "hunters" shooting soft drink cans two miles from anywhere.

When I flushed the gobblers, I was walking along the top of a ridge, hoping to run into a moving group of birds. About 3 o'clock I heard the snap of a twig, and immediately halted. I studied the area below me, where I thought the sound had come from. After ten long minutes I concluded the sound had been made by a falling branch. Bad conclusion. I had taken no more than a couple steps when two large gobblers, looking like figures from a Ned Smith painting, lifted out of a thicket of striped maples only 30 yards away. With my gun slung over my shoulder, I could only watch them fly away. Great hunter, I chided myself, you sure weren't ready, were you? How many times does this have to happen before you learn to be ready all the time?

I really needed to do some serious scouting the next day, but a work day was scheduled at a hunting camp I belong to and I spent the day there. A couple of the guys found feathers from a

turkey that had been shot on the camp property the previous day. However, after we finished our work and looked around some more, we concluded that turkey must've been a loner. There wasn't a sign of a turkey anywhere else around camp.

Monday evening I drove to one of my favorite afterwork hunting areas. However, the knobs and hollows appeared barren of turkeys, just as they had on my scouting trips there. There was no scratching, absolutely no sign of a turkey anywhere. When I checked in with Dad that evening, I found his luck had been the same as mine. He had not found a trace of a turkey, and he had hunted hard all day.

The next evening after work, I chose to hunt what I thought was a lightly hunted ridge, based on previous years' experience. But as I pulled off the road and donned my hunting clothes, a large, loud Blazer appeared on the old logging road at the base of the ridge. It looked as though the Blazer was turning to leave, so I decided to hunt the area anyhow. But when a noisy trailbike appeared only moments later, I figured I was not destined to hunt there that evening. I crawled back into my little pickup and drove to another ridge I had not even scouted. What the heck, I reasoned. At least there wouldn't be a motorcade chasing all the game away.

It was only a short walk from the truck to the knob I had decided to hunt. From previous autumns I knew that turkeys often hung out there because the knob's grapevines provided them with easy pickings. I hadn't gotten very far into the woods when I heard what sounded like a battle in a coop full of turkeys. There were kee-kee calls from young turkeys; loud, constant yelps from what I assumed was a brood hen; and even some abbreviated gobbles from what was apparently an immature gobbler. It was certainly the best turkey

**I EXCITEDLY set up with my back against a big maple tree only 70 or 80 yards from the noisy turkeys, popped a caller into my mouth, and began imitating the loud yelps of the old hen.**





situation I had found myself in all autumn, and I excitedly set up with my back against a big maple tree, only 70 or 80 yards from the noisy turkeys. I popped a caller into my mouth and began imitating the loud yelps of the old hen.

Unfortunately, I was downhill from the turkeys. They were calling from high on the bank, and I knew I could not approach them. They would see me and vanish before I could even dream of getting a shot. I would have to lure them down the steep bank.

For the next five minutes I was engaged in a calling contest: I called as loudly and constantly as the old hen called, and the other turkeys kept up their continuous chatter as well. Suddenly I saw some black shapes lift off the bank above me. The flock was airborne. Looking like a squadron of B-52s, they sailed down the bank. Expecting them to land nearby, I did nothing, even though they flew directly over my head at lower than treetop level.

The turkeys didn't stop. They sailed out of sight, down over a small rise of ground behind me. However, two turkeys were still calling from above me, one kee-keeing, the other yelping. I continued to call, and only moments later I saw one of the birds moving along the bank. I suspected it was going to lift up and glide past me, too, so I rose to one knee to take a shot if it came sailing my way.

Less than a minute later it did. When I figured the bird was in range, I swung my gun ahead of it and fired. I got off two more shots from my 12-gauge pump and succeeded only in turning the turkey. It sailed out along the foot of the steep bank, unscathed by my shots. I guess that shows what kind of wingshot I am.

I was pretty disgusted by my performance. I reloaded and then picked up my empties. I was trying to figure out what to do next when the turkey I'd just missed began to yelp. I nearly came unglued. But I shakily sat back down under the big maple and answered the yelps. A minute or two later, the turkey

yelped again, closer now but up pretty high on the bank. I replied.

Moments later, I saw the bird sneaking along the bank. I called several more times as it disappeared around the end of the knob, yelping as it went. I figured it was time for me to move. Maybe if I climbed to the level the turkey had been on when it walked away I could call it back.

### Settled In

A few minutes later I settled in behind a fallen log. It was after 4:30. I was running out of time. I began to yelp again, and was quickly answered from off to my left, the direction the turkey had gone when it disappeared. I waited a minute or two before making a series of yelps. A turkey answered, this time from my left and below me. I continued to call during the next 10 or 15 minutes, and the turkey continued to respond. Suddenly, I heard the yelps and clucks of several turkeys, which almost immediately came into view below me. It was the flock that had sailed over me earlier, now noisily walking through the dry autumn leaves. There were seven of them: a large hen and six smaller turkeys.

To my chagrin, they walked right past

**SUDDENLY I SAW some black shapes lift off the bank above me. The flock was airborne. Looking like a squadron of B-52s, they sailed down the bank. I did nothing, even though they flew directly over my head.**



the maple I'd sat under earlier, now a good 75 yards away. I made a couple of loud clucks, and the turkeys turned in my direction and began to walk quickly up the bank, obviously looking for me. But why? After all, they had their leader, a mature hen. But she was leading her troops up the hill. I eased off the safety of my 12-gauge and centered the sight on a young turkey to the hen's left. I didn't want to shoot the old hen. The flock would have trouble surviving without her, even though she was now leading them into my ambush.

When the turkeys were within 25 yards, I clucked loudly to halt them. They stopped abruptly and craned their necks, searching for me. It was the opportunity I hope to have once during each autumn hunting season. I pressed the trigger. At the boom of the shotgun, the turkey I had selected fell to the autumn leaves as the rest of the flock lifted into the air. I leaped to my feet and raced down to make sure it did not per-

form a miraculous escape. But it wasn't going anywhere. It lay motionless on the carpet of brown autumn leaves.

I realized that luck had played a major role in my collecting this turkey. I had not scouted as much as I usually do before the season, and I had not scouted this area at all. I had somehow called in a flock that had a brood hen with it, something that experts say is next to impossible to do. I hadn't even gotten to hunt where I'd planned either; the noisy vehicle traffic had chased me away.

And, I had killed my turkey on a one-hour hunt after work. Generally, it takes me a week or more to find a flock of turkeys, usually after serious preseason scouting. I had run into this flock of calling turkeys only 10 or 15 minutes into the woods and had then collected a fine young bird. In the 18 years I've been hunting turkeys after work, this was the first time I'd killed one in the hour I had to hunt. It will always remain a special evening to me.

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**THE PITTSBURGH Chapter of Safari Club International recently presented the Game Commission with \$5000 for land acquisition purposes. SCI chapter president Howard L. Wells, center, is shown here presenting a check to Land Management Bureau Director Jacob Sitlinger while Southwest Region Director Don Madl looks on.**

Edward W. Carlson





# An Unsuccessful Archery Hunter

By Carl W. McCardell

ORDINARILY, the October foliage indicates that grouse and squirrel seasons will soon be here. In 1980, however, a very different form of recreation came into the picture.

I had spent many regular buck and antlerless seasons in Penn's Woods, but it seemed unusual to have whitetails on my mind at this time of year. Even so, I didn't feel the anticipation normally associated with deer hunting.

While making the 160-mile trek to Bradford County, I was treated to autumn's display of colors. The creation was especially stunning as the sun's rays enhanced the outstanding hues.

As I arrived in the Wheelerville Mountain area, I noticed the leaves were at their peak. By the time my week was over, the woods would probably begin to take on a winter look.

Only five of us were in camp, four hunters and one to cook. Archery season had already been open for one full week, but to our knowledge the immediate vicinity had had very little hunting pressure. I listened intently to the flow of tales that night. The veteran bow hunters made the sport come alive, and my enthusiasm increased as the evening wore on. Eventually we went to bed but sleep did not come quickly. Too many thoughts sped through my mind. Much



**FRESH CLAW MARKS on the bark hadn't bothered me until I realized the bear was used to sitting where I was. He obviously knew something was wrong, even though my camouflage hid me quite well.**

good advice had been given to me during the late evening hours, and I had practiced extensively with the tool I hoped to use to harvest a deer, but I knew the thing I lacked was actual hunting experience.

As I was to learn, there is a world of difference between bow hunting and rifle hunting.

Morning finally arrived. With it came temperatures in the 30s. After finishing a fantastic breakfast, the four of us made our way to a large apple orchard. Our basic plan was to cover the main trails leading to and from these fruit trees, as the area had been heavily used by hungry deer.

Climbing into a familiar maple tree I remembered from the previous buck season, I settled down to wait for sunrise.

An hour passed without any major







developments. It was one of those quiet mornings when every little sound caught my attention. So far all had been false alarms. Then, slightly to my right, I noticed a flash of white. It suddenly appeared again behind several large huckleberry bushes. Could it have been a bird swooping by? Or a deer's tail nervously twitching?

I focused on a gap in the foliage. Then I spotted it clearly for a brief instant. There was no doubt about it. The first deer I saw while pursuing whitetails with a bow was a part albino.

The animal was using the thick cover to conceal its movement as it headed for the apple tree 20 yards in front of me. I watched the ghostly creature pause just before crossing another opening in the vegetation.

To my surprise and delight, I glimpsed a rack. My heart rate had quickened when I first noticed it was a piebald animal. Now that I was sure it was a buck, I could feel my heart pounding in my ears. Desperately, I fought to remain calm.

The 6-point began to gorge himself on the sweet apples which had fallen to earth. I eased the bow around one of the limbs—and realized I had a major problem. Unless the deer came three or four steps to the right, I would be unable to get a shot.

I watched the buck for 10 minutes while he ate his fill. Ten minutes doesn't seem long when you are enjoying yourself, but that same amount of time spent in a dentist's chair can feel like a couple of hours. That's sort of how I felt.

Slowly, the beautiful buck began to disappear down the trail to the left of the apple tree. I observed him until he crossed a powerline some 100 yards away. As quietly as he had arrived he disappeared into the surrounding cover. I felt empty. I had lost an unbelievable opportunity. On the other hand, there was a satisfaction from observing such a magnificent deer.

For several days rain dampened the forest floor. The cabin invited four weary hunters. We had time to discuss our lack of success and how to change

the situation. Then, early one afternoon, the rain tapered off to a fine mist. The clouds began to break. Sunlight slowly began to filter to the ground. Being the youngest in camp and the only one who had never gotten a deer with a bow, I began to squirm.

No one else was ready to get their feet wet, so I left camp alone. I decided to scout the orchard for sign. Approaching within 100 yards of my destination, I noticed a doe under the nearest apple tree. She appeared oblivious to the world around her.

The wind was in my favor. Trees and bushes dotted the terrain between the deer and myself. Taking a deep breath, I proceeded to stalk. Dodging twigs, branches and vines, I cut the distance in half in just a few minutes. I knew the rest of the trip would take much longer. If the deer kept eating, I thought, I'd be all right.

### **Closer and Closer**

Occasionally, the doe raised her head to take a quick glance. Each time I was able to halt my forward movement. Ever so slowly I began to get closer and closer.

I had been on an incline when I first sighted the deer, at least 10 feet higher. As I sneaked within 20 yards, I no longer had a clear target. Only the animal's back was visible. This meant one thing. In order to get a shot I would have to sneak to a clump of brush scarcely 10 yards from her. Or I could wait until the deer was finished eating. Perhaps she would cut across the trail in front of me. Somehow I liked the first idea better.

As cautiously as I ever crept up on an animal, I put all my skills to work. I got within seven yards of the doe. The sound of her chewing seemed deafening. Taking at least a half minute to go from a crouch to a standing position, I drew back my bow.

I first saw the deer's shoulder. Her head was down. Slowly, I leaned to my right to avoid a small branch. The deer bolted as though struck by lightning!

Still at full draw, I stood there numb. I don't know how much time passed

before I could relax the tension on my arms. Then I started to shake. Incredibly, I had gone from 100 yards to within a few steps of an adult deer without being spotted. Trying to figure out what had gone wrong at the last moment, I sat down to think it through, but I never reached a satisfactory conclusion.

I saw other deer throughout the week but all were too far away for a decent shot. Maybe next year would be the year. Another “unsucessful” season had ended.

Each year since 1981, I’ve become enthusiastic even before the season starts. Once I have hunted for a particular game animal or bird, the following season triggers those past experiences. Even though I cannot hunt deer in the early fall woods some years, the October foliage always reminds me of my first few experiences archery hunting. Is it any wonder?

I can recall the morning I spent in another part of the abandoned orchard. A cherry tree with low hanging limbs was my vantage point.

Mild temperatures allowed me to wait comfortably. Enjoying the antics

of a woodchuck, some squirrels and a chipmunk, I was startled by a button buck’s sudden interruption. He ran directly under my stand as he headed for a nearby fruit tree.

Then I heard another deer behind me. It was a large doe and she sensed that something was amiss. She refused to proceed any further. I might add this observation: Bucks don’t seem as wary as an old doe. Fellow archers have shot their share of deer over the seasons and their observations, along with mine, are that doe with young still tagging along are extremely cautious during the month of October.

The button buck looked in my direction, slobbering apple juice while he noisily chewed. The doe stood her ground while pawing the earth. Her offspring began to mimic her, then reached for another apple.

I decided to draw on the buck to see if I could get away with it without the doe’s observation. It took a while but she never noticed.

At this time I had both deer in view. The doe began a prancing routine. The little buck did the same. I almost laughed out loud.

These deer brought pleasure to me for nearly half an hour. I had another “unsucessful” year, for this was as close as I came to any other deer that season.

I’ll never forget the next story I am about to share. I was scheduled to leave camp at noon, but in the meantime was sitting in the largest apple tree I have ever seen. It was my final hunt of the week after seeing very little in the way of wildlife.

A chipmunk, my only visitor during the morning, had been racing back and forth, gathering small apples. After a longer delay than usual during one of his excursions, I thought I heard him coming.

Gazing below the branches where I



**THE DEER bolted as though struck by lightning. Still at full draw, I stood there numb. I don't know how much time passed before I could relax the tension on my arms. Then I started to shake.**



had propped my feet, I found myself staring at a very large black bear. As I was only 10 feet off the ground, I could have touched his back with my bow.

The bear, like the chipmunk, was slurping on apples. Suddenly, his nose twitched back and forth. He danced from side to side. Sitting down on his haunches, he looked directly up at me. I froze, wondering if he had any intention of coming up the tree. Fresh claw marks I'd noticed on the bark hadn't bothered me until I realized he was used to sitting where I was!

He obviously knew something was wrong even though my camouflage hid me quite well. After a few muffled grunts the bear got to his feet and ambled away, looking back periodically. I gave him 10 minutes or so, then climbed down from my stand.

What a perfect way to end a week's hunt. Back at camp, my buddies rejoiced with me concerning my bear sighting, but were a bit saddened by my failure to get a deer.

Probably the funniest story occurred when a comrade of mine shared some of his buck lure with me. "We're going to get you a deer for sure this year," he told me.

Pouring some of the foul smelling liquid onto a cotton ball, he placed it at

a strategic location on the trail. He assured me it hadn't failed him yet. I merely had to have the patience to wait for a deer to come to me.

Most of the late afternoon passed by without much excitement. Then, without any warning, I could hear "crunch, crunch, crunch" in the dry leaves. The sound was too quiet to be that of a human.

Sure enough, coming to a halt exactly where my buddy had placed his faithful potion stood the elusive creature. No, not a buck. A turkey. I snickered. Wait until I saw Maurice. Some deer lure!

### More Laughter

There was more laughter in camp than usual that evening. My friend took a good natured ribbing about his tactics. I begged him to keep the bottle handy until we came back in a few weeks to do some serious bird hunting.

Without deer meat for the freezer, I soon departed from the cabin for another year.

At home after each of my archery hunts, well-meaning friends have asked if I had any success—meaning "Did you get a deer?" My answer has always been, "No." But after reading only a fraction of my adventures, do you really think I'm an unsuccessful bow hunter?

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GERALD W. PUTT, long time GAME NEWS cover artist, was recently selected as the 1989-90 New York State Ducks Unlimited Artist of the Year. His winning painting, "Self-Satisfaction," featuring a pair of pintails, will be used by DU on limited edition prints, program books, banquet tickets and other fund raising materials.



# Birthday Grouse

By Paul A. Matthews

IT WAS MY birthday and Ma didn't have a present for me. In those Great Depression days there wasn't money for presents. So when I pulled up to the breakfast table and could see she was avoiding looking straight at me, I speared a hot buckwheat pancake and remarked how good they tasted that morning.

She barely nodded.

And then I took advantage of the situation and said something about how I'd like to go hunting instead of going to school that day, and she rose to the bait like a big bass to a June bug. Her head lifted and just the hint of a smile curled her mouth.

"If you want to go hunting today instead of school," she said, "I guess that could be your birthday present."

## Wolfed Down

Outside there was a warm drizzle, an oil-soft rain that belonged to April rather than the fourth of November. But rain, mud, snow or shine, there wasn't enough bad weather in all of Sheshequin right then to dampen my spirits, and I wolfed down half a dozen pancakes and a pair of pullet eggs in less time than it takes to write about it. Within half an hour I was headed upstream along the north side of Mallory Run with the little Remington rolling block tucked under my arm and a fistful of 32 rimfire cartridges weighting down my pants pocket. In my mind there was a mish-mash vision of squirrels and rabbits stirred in a stew of knowledge that somehow I'd said just the right thing at the right time.

In those days I had established a regular hunting routine. During the morning I would hunt one side of Mallory Run heading away from home, and in

the afternoon I would hunt the other side on my way back. It always made a good day's hunt through all kinds of cover, and I almost always got at least three pieces of game, sometimes four.

But on this day when I started out, I felt extra good about the situation. It was going to be one of those days when I couldn't miss, and the game was going to fall all over itself trying to make the best of a spring-like day in the fall of the year. The drizzle wasn't much more than a fine mist when I crossed the creek and started upstream along what was known as Tony's pasture and headed toward Chapman's woods. I had one of those fat, stubby 32 cartridges snuggled under the breech block, and I carried the little rifle two-handed, ready for a quick shot.

Back in those days I often fell into cotton-fluff daydreams instead of paying strict attention to the job at hand. In my mind I relived the exploits of the great hunters I'd read about, and when the rabbit dashed from a tuft of timothy and goldenrod, my little Remington became a heavy double 470 and the rabbit a charging rhino. It was only after I'd missed him clean and was flipping the still smoking cartridge case from the breech that I got both feet back on solid ground.

I watched as the rabbit disappeared, marking in my mind where I figured he might stop, and then commenced my stalk. More than once I'd spotted a rabbit crouched in a tuft of goldenrod or in the nook of an old stump fence after I'd jumped him minutes earlier. And more than once the rabbit had paid the price.

I worked slowly, taking a few cautious steps and then stopping to scrutinize every bit of cover that could hide a rabbit. I had learned long ago that they usually veered sharply to the right or





Scot  
Alpine

Scot

left just after they passed from sight, and that they didn't always go far. But you had to approach them slow—real slow—if you wanted to spot them.

I eased my way around a little scrub pine about 30 feet from where an old tree had fallen years ago. The basic log was still there, weather-grayed by storm and sun, and as I studied it, I knew in my mind that this was the spot. This was where I'd stop if I was the rabbit.

### Black-Marble Eye

The rabbit didn't come into view all at once, but more like an image on a photograph in the developing tray. First, I spotted that black-marble eye, and then the rest of the form and shapes and colors came into focus. My thumb, already curled around the hammer spur, pressed the hammer to full cock as the little rifle came up. And in an instant I had the rifle to my shoulder, the sights aligned on that glistening eye and my finger pressing the trigger.

That was the same instant in which the rabbit flinched back and then bolted.

Watching the rabbit go, I felt like a

balloon with a slow leak. And with a good share of my enthusiasm dribbled away, I thumbed another cartridge into the chamber and headed toward Chapman's woods. Gray squirrels were usually more plentiful if not more cooperative.

Somewhere during those few dozen steps between the rabbit log and the border of the woods, I grew careless again. I turned my mind off rabbits and onto squirrels with no thought given to what might lie in between. I was in that cotton-fluff daydream again when an old long-tailed ringneck got up in a flurry of cackles and brilliant feathers and went sailing off toward Ike Young's cornfield, leaving me standing there like an open-mouthed dummy. With a shotgun, he'd have been duck soup, but with a rifle you have to get them on the ground. It just isn't safe to fire a rifle in the air, even if you think you can hit what you're aiming at.

The woods were quiet. The leaves were soaked from the all-night drizzle and footsteps were hushed in the damp softness of compost. I worked my way along old logging trails, my eyes peeled for that telltale flash of gray that marked an old bushytail. And when I spotted one, I froze into position, moving ahead only when I knew the critter couldn't see me. Most of them, I never got a shot at.

But one of them, I did.

He was downhill from me, digging in the leaves for beechnuts so that about all that was showing was his tail. My heart quickened as I pressed the hammer to full cock and sidled up to an oak. There, I held the rifle trained on the squirrel, and the moment it backed out of the leaves to sit up and take a look, I sent the little 32 slug on its way. I had my first game of the day.

Despite my success, the hours were fast passing. I'd goofed up on the rabbit



**THE RABBIT** didn't come into view all at once, but more like an image on a photograph developing tray. First I spotted that black-marble eye, and then the rest of the form came into focus.



and maybe I'd have got the ringneck if I'd tended to my knitting instead of daydreaming. So as I gutted the squirrel and looped him over my belt, I vowed that for the rest of the day I'd stick to the business at hand.

Squirrels were all over the place. Anybody with a shotgun could have taken the limit in a half-hour's time. With a rifle it was different. I had to wait until I got a stand-still shot so I could be almost certain of a clean kill and not a cripple.

But not many squirrels were accommodating that day. I would spot one at a distance and, if it was working toward me, I'd sit down with my back to a tree and wait. I'd follow it over the sights of that little rifle, watching it get closer and closer while my heartbeat kept drumming louder and louder in my ears, and the little critter would never stop once long enough to get a shot. In the end I'd let the hammer back down and move on until I spotted the next bushytail.

It was during one of these moves that I almost stepped on a grouse. I was nearing the spot where I always stopped to eat lunch, and I spotted a couple of squirrels chasing each other around an old beechnut. First, they'd go around the tree half a dozen times, and then they'd race off along the floor of the woods, chasing along old blowdowns, around the bole of a white oak, and then back to the beechnut.

I watched this go on a few times and then noticed that often they would stop on opposite sides of the beechnut, stop long enough to get a good shot. All I had to do was to work in close and then wait.

Easy as it sounds, things don't always work out as planned. The squirrels had just started racing along old blowdowns when I started my stalk. I had a spot picked out at the base of a hemlock about 50 feet from the beechnut, and I made toward it one or two steps at

a time whenever the squirrels were busy. Everything was going just dandy until I put one foot over a log and a grouse boiled out with enough racket to bring both squirrels to an upright stand-still position. And before I could get my heart back down in my chest where it belonged, the second grouse V-A-R-O-O-M-E-D out and the two squirrels scattered.

### How In The World

It didn't do much for my enthusiasm. As I sat there eating my lunch, I wondered how in the world I had missed seeing the grouse before they flew. Certainly they were within wide open view and not more than 15 feet away. More than that, Ma loved grouse and it was only on rare occasion that I ever got one. Somehow, I decided that my eyes hadn't been open to grouse — they were riveted on squirrels. And like it or not, my eyes saw only what I wanted them to see.

While heading home along the other side of Mallory Run, the sun began breaking through the overcast and thin wisps of fog steamed up from underfoot. As good a day as it had been for hunting,



**I WAS IN that cotton-fluff daydream again when an old long-tailed ringneck got up in a flurry of cackles and brilliant feathers and went sailing off towards Ike Young's cornfield.**



**I SAW the bird flop, its wings beating against the leaves, and then I heard another sharp flurry of wings as the second bird flew up only to land on a limb not 20 yards away.**

my birthday and all, I really hadn't done very well. The single squirrel draped over my belt certainly needed some company if Ma and I were to have a fried-squirrel supper—or fried anything, for that matter.

I changed my tactics. The woods below the old Chandler barn held a lot of oaks, a few of them being hollow den trees that had stood there for upwards of a century. I eased my way among them, picked out a spot that afforded a good view, and sat down. Patience, I thought, is the greatest virtue of the squirrel hunter.

Sure enough. I hadn't been there 10 minutes when I spotted an old bushytail in the craggy limbs far above me. He ran back and forth along a limb a couple of times and then popped into a hole in the main trunk. I kept my eye on the hole and within a few minutes he came out again, raced to the center of the limb and sat there like a rock gnawing on an acorn.

Ah! This was it! I eared the hammer to full-cock and brought the rifle up. As

I did so, the sun made a dazzling reflection off the corners of the octagon barrel where the blueing had been worn from years of handling. To the squirrel, the reflection was like a neon warning light and in an instant he was flattened against the limb with only the tips of his ears showing. I waited until the afternoon chill began to settle in and then stood up and headed for home. In the pit of my stomach, a lump of disappointment swelled outward.

A few hundred yards downstream from the den tree, a basin had been scalloped out, perhaps formed by some glacier in the dim past. It wasn't a deep basin, but a basin scooped out by some giant hand and planted with beeches and oaks. It was always a good place for squirrels and as I approached it, I saw a squirrel run from the woods above and disappear over the rim of the basin.

I was desperate. I put every bit of woods knowledge and know-how to work as I made my approach. Every footstep was slow and deliberate, and I eased my weight down carefully lest I



break a dead twig or branch underfoot.

I didn't know for certain whether or not the squirrel had seen me. I hoped he hadn't. I hoped he was just under the rim of the basin digging in the leaves for beechnuts or acorns.

Each step I took opened more of the basin floor to view, and I stopped at each step to scrutinize the new area. With my thumb hooked over the hamper spur, I tested the hammer, making certain it was there.

Then I saw it, his head under the leaves just like the one I'd taken earlier in the day. The little rifle snapped to my shoulder, and while my heart pounded against my ribs, I waited. The instant the squirrel stood up . . .

And then out of the corner of my eye, I saw something else—a grouse, frozen like a chunk of stone not five feet from the squirrel. The rifle shifted and hardly had the sights settled just under the head when I pressed the trigger.

I saw the bird flop, its wings beating against the leaves, and then I heard another sharp flurry of wings as the second bird flew up only to land on a limb not 20 yards away.

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## GAME NEWS

For a Friend . . .

In those next few seconds my hands were a tangle of thumbs and fingers trying to feed a fresh round in the chamber. I dropped the first cartridge on the ground, but managed to get the second one in and get the breech closed. And while that bird still sat there, I took my second shot, this time aiming for the juncture of the neck and body because I was too excited for a steady head shot.

The bird folded and I let out a whoop that could have been heard halfway home. No amount of money could have purchased a better birthday present than I had that day, and no lesson in school would have made such a lasting impression. When I held the birds up to Ma that night, a grin on my face a yard wide, I could tell that a burden had been lifted.

"Happy birthday," she said.

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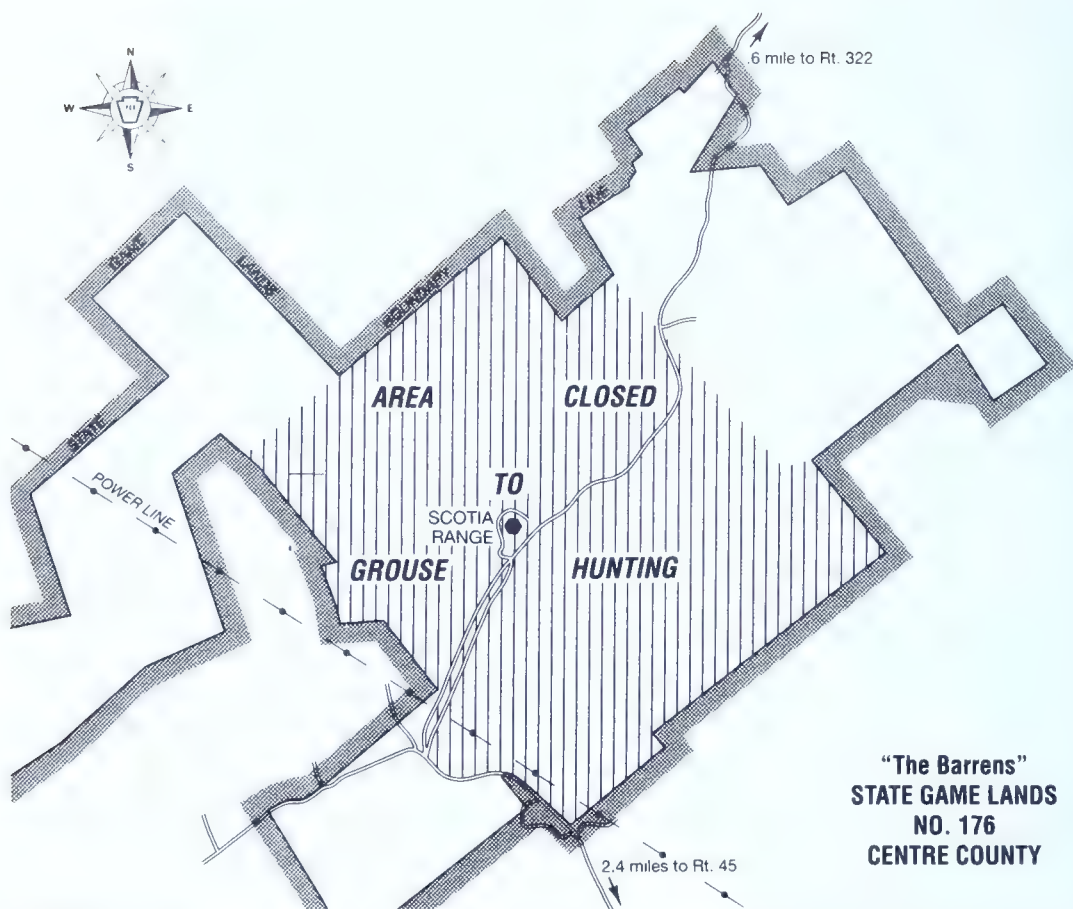
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A 2800-ACRE site located on the "Barrens," a part of SGL 176, Centre County, has been closed to grouse hunting for five years so research biologists will be able to more fully evaluate the relationship between grouse numbers and habitat management techniques.

## Closing the Barrens to Grouse Hunting

By Bill Palmer

PGC Wildlife Biologist

**I**N 1975 the Game Commission launched a long-term study to develop timber management strategies that would benefit ruffed grouse populations. Such information would prove valuable to land managers, foresters and private landowners who want to manage timber and, at the same time, establish and maintain optimum habitat for our state bird. Ultimately, of course, hunters stand to benefit the most.

The focus for this research project is a 2800-acre site located on the "Barrens," a part of SGL 176, Centre County. Designated as the "Barrens Grouse

Habitat Management Study Area," the site has been divided in half, into treatment and control portions.

The treated half is divided into 136 10-acre blocks, each of which is subdivided into four square patches. Within each block the patches are being cut on a 40-year rotation for aspen/scrub oak type (60 blocks) and an 80-year rotation for the mixed-oak type (76 blocks). From the air the treated portion looks like a giant checkerboard. The initial cuts are being made at shorter intervals to bring the mature plant communities into early succes-



sional stages sooner. The idea is to provide a diversity of habitat within each 10-acre block to satisfy the year round needs of a pair of ruffed grouse. The other, control, half has not been cut. It serves as a check or measure from which the effects of the timber management strategy on the other half can be evaluated.

Grouse populations have been systematically censused on each half every year since the project began. This has been done by conducting fall and spring flushing counts, censusing drumming males, and from grouse flushing rates by hunters. The difference between grouse numbers on the treated and control areas is—we would like to assume—a result of the cutting.

The fall flush counts indicate the birds have recently begun to increase on the treatment half of the study area, just as we had expected. However, there also has been a marked increase in hunting pressure and grouse harvest on the area, with the treated half receiving about twice the pressure as the control.

This unequal hunting pressure is masking the effects of our timber management strategy, making it impossible for us to assess the full value of the habitat management technique. We considered several ways to equalize the hunting pressure on the two areas, but the most feasible was to just close the entire study area to grouse hunting. This is what was recommended to the Game Commissioners, and at their January meeting they voted to close the Barrens study area to grouse hunting for five years. All other types of hunting are still permitted on the area.

By eliminating the hunting pressure/grouse harvest variable, we will be better able to assess the relationship between grouse numbers and the habitat management technique. We recognize that this decision will inconvenience those grouse hunters who enjoy hunting the Barrens. Yet such short-term sacri-



#### Question

Is a pheasant hunter allowed to walk along a mechanical corn picker while it's picking corn?

#### Answer

No. According to the Wildlife Code, it is unlawful for any person to hunt or take any game or wildlife through the use of a vehicle or conveyance of any kind or its attachments propelled by other than manpower.

fices are normally necessary to make long-term advancements.

Grouse numbers in Pennsylvania peaked around the turn of the century, when a large part of the state that had been clearcut decades earlier developed into prime grouse habitat. But land is not being managed today like it was a century ago, and in another hundred years, land management practices will most certainly be a lot different than they are today. Therefore, it's imperative for those of us charged with the future of this bird to continually stay abreast of land management practices so the needs of the ruffed grouse—and all other wildlife—will not be ignored or forgotten.

A few years of no grouse hunting on this area will help us better understand the relationship between grouse numbers and our timber management schedule. The Barrens grouse study is but one facet of our grouse research program. If we can demonstrate that this type of habitat management will work, it could be applied to more forest lands in the state which, ultimately, will mean better hunting opportunity in the future.



# Opening Day Opportunities

By Joe Kosack

**I**T WAS 8:30 a.m. on the opening day of rabbit and pheasant season and we were parked, of all places, at the drive-through window of a McDonald's, waiting for coffee. Where my partner Barry and I were going to be hunting in the next 30 minutes was unknown, but for once we decide we weren't staking out some field for the hour before season to deter others from going there too.

At 8:45 we pulled into the driveway of a farm owned by some friends, and to our surprise no other vehicles were there. Excited about the possibility of having this small game utopia to ourselves for the opening hour, I hurried over to the porch and rapped on the door to talk with the owners, Shirley and Smokey, about hunting on their land. I knew that getting permission

wouldn't be a problem, but it's something I do every year.

As Smoke opened the door, however, I noticed we were not the first to arrive. There in the corner of the kitchen, another hunter was slipping into his game vest. What the heck, I thought, one more hunter wasn't going to ruin our opportunities.

After asking to hunt and briefly catching up on the events that had shaped our summers, I went back to the truck to tell Barry to get the shotguns off the rack. Upon reaching the truck, however, I saw something coming up the lane that drained the enthusiasm that was overwhelming my body. Five hunters were walking toward us.

As it was 8:55, we decided to stay on the farm, despite the crowded condi-





tions and the frown on Barry's face. But what we didn't know then was that four more hunters would also be in the big weedfield in the next five minutes. At 9 o'clock 13 hunters crowded the large field.

"What the heck did we get ourselves into," Barry asked as he and I began to work around the remains of an old barn foundation.

"We'll soon find out," I replied.

Two minutes into their drive, the party of five to our left flushed three birds, all hens. They flew unmolested about 60 yards to our front into an area covered with thick patches of multiflora rose, blackberry bushes and saplings.

"That's where we're gonna get the game," I told Barry as we watched the trio drop into the thicket.

"Yeah, yeah, yeah," he said.

Our zigzagging up to the edge of the thicket moved nothing but fleeting songbirds, but shortly after we entered the thorny haven, I flushed a cottontail that flashed around the briars and out of

sight before I could fire. I didn't bother reporting the rabbit to Barry because it ran to my left into the section the band of five was hunting. Besides, he already was upset enough over the hunting conditions.

The rest of our hunt through the field offered little more than exercise and the opportunity to watch a big doe rise from her bed in the thorny vegetation and run into a nearby woodlot. As we stood at the field's edge and looked at all the hunters heading our way, we decided to follow the deer because there was another good small game area beyond the woodlot. In addition, it was the only direction from which hunters were not approaching us.

"Look at these!" Barry said as we walked through the woodlot. "Fresh turkey scrapes, and they're all over the place."

For a minute we stared at the scrapes and the surrounding area and talked about getting lucky, but we soon decided the big birds were long gone. Be-

sides, we were in the middle of opening day rush hour hunting, where every minute and movement could have a sizeable effect on our yield. We had no objections to taking turkeys, but thought our chances of bagging roosters and rabbits were better.

### Disagreement

On the other side of the woodlot a narrow strip of woods jutted into a grassy field. It looked so promising that we headed right for it. The wooded strip was flanked on one side by tall weeds that both of us wanted to hunt. There was short grass on the other. We decided that one of us would drive the woods, while the other hit the weeds. That's when our disagreement over which of us would hunt the weeds started.

To determine who would have stomping rights to the weed strip, Barry flipped a coin and I successfully called, "Heads." Looking back, I wish I'd lost, or at least agreed when he asked, "Two out of three?"

About a minute into our drive of the weeds and woods strips, I spotted a deer slinking away from Barry in the dense understory of the woods. I asked if he

could see it too. He told me it was too thick with branches, saplings and weeds to see that far ahead. "The only critters we're gonna get on this drive are what I see at my feet and what I chase to you," he said.

"That sounds pretty fair to me," I joked.

Barry couldn't see very far to his front, so I decided to watch his and mine because ringnecks have a nasty habit of running, instead of flying, in slow drives. It was good I did, for a moment later I saw several wild turkeys moving through the dense cover about 30 yards in front of Barry.

"Turkeys!" I hollered, and pointed. We huddled and quickly decided to race along each side of the strip to get ahead of the flock. We hoped that the birds would fly into the open field when we closed in on them.

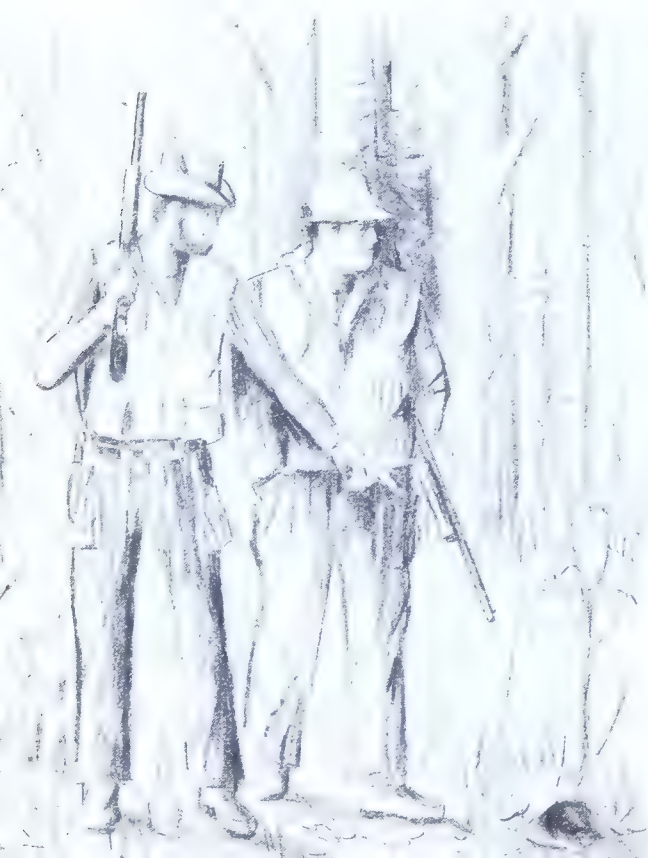
Guns at the ready, we sprinted about 40 yards until each of us saw movement within. Suddenly, Barry's shotgun roared and three turkeys exploded from the weedy floor of the woods strip.

And then, charging like bulls closing in on a red cape, two 4-point bucks came right at me. Above them flew more turkeys, mostly away from me. As I fired at one of the turkeys, the bucks came to a sliding halt, then turned and ran down through the woods strip to my front. Although I missed the bird, it appeared my hide was safe. Still, self preservation was the least of my concerns in this melee; I wanted a turkey!

I caught a glimpse of another bird flying away from me about 30 yards to my front, and led it with two shots. I didn't score, though, and frantically began to dig in my pockets for more shells.

Deer and turkeys continued to pour out of the woods, and I heard Barry shoot. Another bird flew out to my rear as I was reloading. This one also presented a 30-yard shot by the time I could fire. Another miss.

**WE STARED** at the scrapes and the surrounding area and talked about getting lucky, but we soon decided the big birds were long gone. Besides, we were in the middle of opening day rush hour hunting.





As the frantic exodus from the woods continued and Barry's shooting ceased, I could hear shooting in the fields nearby. We obviously weren't the only ones surprised by the turkeys.

As the last deer bounded across the field, I heard a flopping sound in the woods. When I closed in on it, I spotted Barry approaching. "Get back," he said facetiously. "That one's been shot already!"

When the noise stopped, he reached down and picked up a yearling hen turkey. The frown he had been wearing since 9 o'clock was replaced by a smile.

After a healthy handshake and numerous slaps on the back, Barry tagged the bird, which he said he had shot while it was running through the weeds, and we began to hunt again. However, Barry couldn't get the turkey into his game bag and he soon tired of carrying it tied to his belt, so we decided to take it to his home.

After field-dressing the turkey, we hit a woodlot near his home. In the first five minutes I flushed two rabbits, and missed both as they zipped through the weeds.

"I should have spent more time hunting doves and squirrels this fall instead of fishing for bass and trout," I told Barry as I searched for the second rabbit, which I pretended I had hit.

"Come on," Barry said. "You know you didn't hit that rabbit, it was running too fast. Let's go see if we can find you a hopper or one with three legs!"

Approaching the last good cover in the area, a large patch of multiflora rose, Barry saw movement inside. We worked around the thicket, one on each side, edging into it wherever we could. Suddenly a cockbird rose between us, cackling harshly, and took off to our front. I shot twice and Barry once as the bird departed. The only thing that came down was a few feathers. What a day, I thought, and looked at my puzzled part-

ner. He just shrugged his shoulders.

"Either that cockbird's wearing a flak jacket or my shooting's getting as bad as yours," he said.

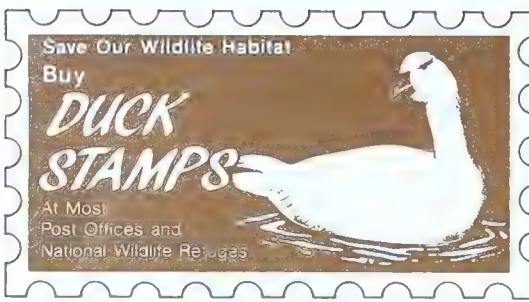
"Yeah, yeah, yeah," I muttered as I replayed the missed opportunity on cranial video. "But I think my shooting is improving; I got some feathers this time!"

We hunted along the edges of some clover and weed fields, but the wind that blew across the hilltop location made following a flushed rabbit difficult. Still, Barry managed to kick out two within 15 minutes after entering the field, but he missed both, much to my pleasure. My turn came a short time later when my zigzagging through the clover booted out two rabbits. I missed both, and my chance for redemption. Of course, Barry couldn't resist a comment.

"You shouldn't have shot," he said. "They both had four legs!"



**WHEN THE noise stopped, he reached down and picked up a yearling hen turkey. The frown he had been wearing since 9 o'clock was replaced by a smile. After a healthy handshake, Barry tagged the bird.**



Hunting our way back to the truck, I all but stepped on one of those tight-sitting rabbits. As he darted across my front, I fired and missed, but I tumbled it with the second shot. I looked over at Barry, who was waiting for the usual report, and smiled.

"Well, it's about time," he said. "I was beginning to think you'd lost the touch. And look—it's got four legs!"

The rest of the way back to the truck, I couldn't help but smile as that rabbit bounced in my game bag. It seemed to justify my efforts on this day and it surely silenced Barry's tongue for awhile.

At our next stop we hunted the slope of a wooded hollow where Barry and I had both bagged plenty of small game as teenagers. Five minutes into the woods, Barry kicked a cottontail out from under a brushpile. He fired, stopping the rabbit with his second shot at about 20 yards.

"You must have been watching closely when I dropped that other rabbit," I said.

"No, I was watching when you missed all the others. Your clinic on how not to shoot at rabbits was absolutely exceptional!"

The rest of the hollow offered no other rabbits or roosters, but we did put up three timberdoodles that presented challenging shots, none of which we made, of course.

Our efforts during the rest of the day put seven more rabbits out, but we missed them all. Four were hole-divers, though, so we didn't feel too badly about the missed opportunities.

Although we didn't have the opening day success we should have, Barry and I sure did find the game, the basic prerequisite to filling your game bag in Penn's Woods. Despite our ineffective shooting, we both had a fine day and carried home two rabbits and a turkey.

Adding it up on the way home, we realized that in roughly five hours of hunting, we had flushed at least a dozen turkeys, 16 rabbits, three woodcock and one rooster.

"We couldn't have asked for a better day," Barry said as we walked toward his house.

"Yeah," I said, "but the next time we go, I'll take the turkey and you can have the rabbits!"

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## Cover Painting by Bob Sopchick

Ring-necked pheasants aren't the popular game animals they were a couple of decades or so ago, but they are still providing sport for those willing to expend the effort it takes to find them. Housing developments and industrial complexes now occupy many areas where pheasants once thrived, and today's clean farming techniques make many agricultural areas uninhabitable for pheasants and all sorts of other wildlife. Pheasants may still be found, however, often on neglected farms and on the fringes of suburbia, wherever ample, suitable year round cover exists. And to supplement wild populations, the Game Commission annually produces nearly a quarter million birds. For more on what the agency is doing to improve pheasant hunting opportunities, take a look at "What's Up at the Game Farms," beginning on the next page.





**THE GAME COMMISSION** is no longer mass producing pheasants to serve only as game for hunters. Instead, emphasis today is on producing pheasants more likely to survive and reproduce in the wild.

# What's Up at the Game Farms

**By Carl Riegner**

**Chief, Propagation Division**

**I**N 1984 the Game Commission revamped the entire ring-necked pheasant propagation/stocking program. The philosophy to mass produce strictly "gun fodder" pheasants was thrown out the proverbial window and, in its place, steps were initiated to produce a bird more likely to survive and reproduce in the wild. Also since then, the agency began experimenting with Sichuan pheasants, a subspecies the Michigan Department of Natural Resources obtained from the People's Republic of China.

We learned from studies conducted in the early 1980s that our traditional game farm pheasants did not survive in the wild nearly as well as relocated wild pheasants. Based on those and other findings the agency implemented new rearing techniques designed to produce

a bird better prepared for living on its own. In essence, this meant producing birds under more natural conditions and minimizing their contact with humans, in hopes the growing pheasants would learn to fend for themselves and retain their natural wariness.

The most obvious effect of this policy change was that we could no longer raise the number of ringnecks sportsmen had become accustomed to. Production quotas were reduced from an all-time high of 425,217 pheasants released in 1984 to the present level of approximately 220,000.

Upon hatching, chicks are immediately transferred from the incubators to brooder houses, where special care is taken to minimize human contact with the new chicks during their first 24 to 36 hours, a critical time for imprinting.



**TO PROTECT** and yet acclimate the growing pheasants to living in the wild, large, net-covered enclosures, above, are planted with oats, corn and other grasses, weeds are allowed to grow, and poles and treetops have been added for roosting. Below, game farm worker removes eggs from nest.



And while the crowded conditions under the old system forced us to clip or strap the birds' wings and trim their beaks, today we use vinyl-coated wire and top-netting to protect and keep the birds separated into smaller, more natural size flocks.

To further reduce competition and stress between pheasants, and to lessen the need for employees to perform routine maintenance, rearing densities in the holding fields were reduced, generally from one bird per 25 square feet to one bird per 55 to 75 square feet. Also,

to reduce human contact with the chicks, and to help prevent potential disease problems, the Commission no longer conducts game farm tours or even allows the public on the farms.

When the chicks have developed sufficiently to withstand outside environments they are moved from the brooder facilities to net-covered, unmowed natural hay and grass fields. Poles and treetops for roosting have been placed in the pens, and as the chicks get older, more acreage is provided by opening gates to adjoining, larger covered pens. To help acclimate the pheasants to natural food and cover, plots of oats, rye grass, sorghum and corn are planted, and grasses (timothy and brome grass) and weeds (goldenrod, giant foxtail, and lambs quarters) are allowed to grow in the pens.

Disease control is a major concern at our game farms. To safeguard against accidentally releasing sick birds into the wild, a regular testing regime is maintained at each farm. After the birds reach 16 weeks of age, blood samples are taken from 20 percent of the birds in each flock. The breeder flock is also sampled, in the spring, prior to egg production. The blood samples are tested for avian influenza, mycoplasma synovial, mycoplasma gallisepticum and pollorum. No evidence of any of these diseases has yet been found.

### The Sichuans

In the spring of 1985, for the first time in more than 100 years, wild pheasants were brought to North America from the People's Republic of China. The Michigan Department of Natural Resources received Sichuan pheasants as a gift to promote friendly relations and initiate the exchange of scientific knowledge.

In February 1987, the Pennsylvania Game Commission received 40 Sichuan cock pheasants from Michigan in exchange for wild turkeys. A research project was launched that year, when we began to cross breed the Sichuan males with wild-trapped ringneck hens. The first offspring were released that



September, at study sites in Mercer and Franklin counties. Subsequent releases were made in September 1988 and again last month.

Unlike the ringneck, which prefers agricultural lands, Sichuans thrive in different habitats. Because in China they inhabit mountainous oak and pine forests in the northeastern region of the Sichuan province, it's thought the Sichuans might adapt to the neglected agricultural and nonagricultural habitats in North America.

The production of the Sichuan hybrid at the Game Commission's experimental game farm came to a close after the third, final, release of birds last September. Research biologists using telemetry equipment will monitor the birds at each site for another two years, to determine habitat use, survival and productivity.

### New Stocking Guidelines

Last spring the agency developed a new pheasant stocking policy to more evenly distribute birds in the field. Guidelines and quotas were established by region, based on hunting pressure and available pheasant habitat. This year 232,176 pheasants will be released. The Propagation Division allocated a statewide fall release of 127,200 male pheasants and 40,800 hens for hunting.

Complementing our fall releases are 7788 chicks we gave to sportsmen's organizations participating in our day-old pheasant program. Clubs raise these birds and agree to release them on lands open to public hunting.

Our breeder flocks, consisting of 22,635 hens and 1753 males, were released in pheasant habitat last May and June, after they had provided sufficient eggs for the fall allocations but while they still held potential for natural reproduction in the wild after their release.

In another attempt to augment natural populations, and to give hunters a chance to train their dogs, 32,000 hen pheasants were released in early September. We've learned that hens re-



**BLOOD SAMPLES.** above, are taken from 20 percent of the birds in each flock to safeguard against releasing any sick birds into the wild. Rearing densities in the holding pens, below, have been reduced to cut down on competition and stress among the birds.



leased at that time are more likely to succeed in the wild than those we keep over the winter and release the following spring.

According to our new stocking schedule, 40 percent of the total fall allocation will be released during the week prior to the opening day of pheasant season. The first in-season release will be made during the first week of the season, as



**AS OPPOSED** to the familiar ringneck, above, the Sichuan pheasant, below, has a yellow eye and no ring around its neck. It's thought that Sichuans might adapt to neglected agricultural and nonagricultural habitats in North America.

close to the weekend as possible, when 35 percent of the fall allocation will be turned loose. The remaining 25 percent will be released the following week of the season.

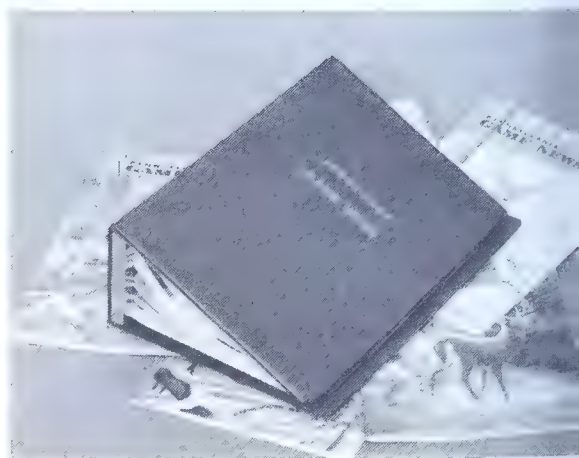
The sex ratio of the stocked birds will be 75 percent males in the male hunting only counties, and 75 percent hens in counties where both sexes are legal game. Percentages may be adjusted slightly, depending upon the actual birds available at the time of release.

Birds are released on state game lands, other public lands, and private

property enrolled in our public access programs, where suitable pheasant habitat exists.

Although the Pennsylvania Game Commission has not increased pheasant production since 1984, sportsmen going afield this fall should find ringneck pheasant hunting more challenging and bountiful. The Commission's game farms are continuing efforts to produce top quality pheasants to increase sporting recreational opportunities and, ultimately, establish self-sustaining birds in the wild.

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# My King of the Mountain

By Jennifer Gutshall

**H**UNTING is a tradition in my family. Ever since I can remember I have looked forward to the day I, too, could join in the hunt. My father is probably the best hunter I know, and it seems he had gotten a deer every year but one—my first year hunting. I carried a 20-gauge single shot. Neither my mother, father nor I had been successful in buck season, so we were trying our luck in doe season.

Soon after we arrived at our spot a nice size doe wandered by. She stopped broadside and looked directly at us—a perfect shot. Dad stood there with me and said, “She’s yours.” I couldn’t shoot. The deer turned and walked away. Later on that day we took a walk and came upon a deer lying behind a stump about 20 yards away. My shot was true, killing the deer instantly. The next year I got nothing. My third year I carried a 30-30. I saw one buck the first day and I shot him, only to have him wander down the hill to another hunter and be shot again, costing me my only opportunity that year.

The next year, 1987, I was 15 years old and very confident. I had a new place to sit, one from which I could look down over a ridge frequently traveled by deer. I also was carrying a more powerful gun, a Winchester 308.

On Thanksgiving morning my grandfather, dad, uncle and I checked out our spots. My father would be just up the hill from me, looking down over the side of the ridge. My uncle was several hundred yards to my left, and my grandfather several hundred yards beyond him. My father gave me a police whistle to blow if I needed him for any reason. This whistle could also be heard at my uncle’s spot.

Opening day finally arrived, but at 4:00 a.m., I can’t honestly say I was looking forward to the 90-minute hike to my

stand. We left our cabin at 4:30 and drove to the base of the ridge to start our hike. I got to my spot at 6:30, settled down and waited impatiently for the light of day. Many thoughts raced through my head while I waited. My goal was to get a deer before Dad. I wasn’t really worried about getting a deer; something inside me just told me I would.

As it started getting light I noticed a man sitting to my left, about 100 yards away. I wasn’t sure if I should move or not. Luckily, I waited and he soon left. Not long after, five deer appeared in the distance. They were too far away to tell what they were, but they got my blood flowing, warming me up again. Then movement below caught my eye. It was a small fox, one I was to see many more times that day.

## Suddenly

I kept thinking I could hear deer running below me in the brush, but could see nothing. Then, suddenly, I heard a shot. I knew right away who it was, the one person I know who never misses—Dad. There went my goal.

I stayed put, though, and around 9:30 I heard noises above me and they were getting closer. I quickly moved so there was a tree between me and the sounds. Scanning the area, I kept thinking this would be it. But when a large figure appeared over the top of the hill it wasn’t a deer, it was Dad. When he reached my spot I told him he was the most disappointing thing I had seen all day—and I meant it. He had shot a nice 5-point and was taking it back to the cabin. He said he’d be back later. When he asked me how I was doing I told him everything had been too far away. He told me to be patient and that sooner or later one would come close enough for a good shot.





I sat waiting for the deer Dad told me about, and after about an hour, a spike buck ran by with two does. I was unable to get a shot. I was certain that was the deer and that I had lost my chance.

The wind began to blow even harder, and I got colder than I had ever been. I felt frozen all the way through. Oh how I wanted to see something, even a small doe, anything that would warm me up and get me alert. Over the next hour or so I saw a few does. They were close enough to see what they were but did little to warm me up. I needed to see a buck, even one with one antler would make me happy. At that point a small buck would have made me just as proud as a trophy and would have suited me just fine.

About 11:30 I sat down to get my sandwich and heard a loud crashing noise down over the mountain. I quickly picked up my gun and watched. A doe came first then a buck. There was no doubt. His antlers were a beautiful white. I don't remember exactly what happened, but he was running full speed away from me when I aimed and shot. I hit him in the neck and he went down.

I pumped in another cartridge and put the safety back on, then started walking down the hill, closely watching the spot where he had fallen. I saw his head. He was getting back up. I quickly put the gun up, clicked off the safety, and shot again. That time I broke his neck.

After putting the safety back on I excitedly half ran, half walked down the hill, half laughing and half crying to the spot where he had fallen. By the time I got there I was shaking so badly I could hardly do anything. The first thing I did was start to fill out my tag. When I came to the part about the number of points I realized I hadn't even counted yet. I checked; it had seven, four on the right and three on the left.

After completing the tag I attached it to my trophy's ear and then ran up the hill to signal Mom, my uncle, or whoever else happened to respond to my whistle. Just as I blew the whistle, my

Uncle Mike appeared. I yelled that I had gotten one. Then, when my sister appeared, I ran back down the hill to my deer to await their arrival. I soon realized that it wasn't quite where I had thought it was. I looked up to the top of the hill to get a basic idea of how far down I was, and saw my uncle, sister and mom, who had joined them, coming down to see my deer.

Wouldn't I look like a jerk, I thought. I could just imagine them coming down the hill to see my deer and me not knowing where it was. How could I do something so dumb? I walked down a little farther and saw the antlers sticking up above a log. I ran down and proudly stood beside it. My uncle was the first one down, followed by my sister and then Mom.

### So Big!

None of us could believe the size of it. The first thing my uncle said was, "You beat the old man." Of course, that meant a great deal to me. He walked around the deer and said, "This buck was the King of the Mountain." We all just stood there and looked at it for about 20 minutes. The white on his body was a snowy white, his nose was coal black. He was the biggest deer we had ever seen. He was so big! My uncle said it was probably the biggest deer brought off that mountain for years. It was certainly the biggest deer I had ever seen.

Well, now came the work. After looking over the deer, my uncle got out his knife. My father had shown me how to dress a deer, but that had been a long time ago and I didn't really remember how to do it. Besides, my uncle didn't really object to doing it, and I wasn't about to change his mind. Before starting he looked up at me and said, "This is the biggest deer I have ever had to contend with." After my lesson was over, I knew it was time to start dragging him, first up hill, then down. I really wasn't concerned with the down part, it was the up part that worried me.

My uncle put the rope around the deer's antlers and said, "I'll give it a try." He grasped the wood handle and took



**I SAT for a long time just looking at my deer. I still couldn't believe that I had dropped such a nice buck with such a good shot. It was great!**

pulled in. He had one, too, a nice spike. But like Dad's, when hung beside the King of the Mountain, it looked small. I sat for a long time just looking at my deer. I still couldn't believe that I had dropped such a nice buck with such a good shot.

It was great! Hunters stopped at our cabin just to see my trophy. Others drove by slowly and gazed at it. I couldn't believe how fast word had spread. Ours was the only cabin with three deer hanging. After everybody returned from their hunting trips they congratulated me and told me I should be proud. I was.

After supper that night my mom, sister, brother and I got ready to leave for home as there was school the next day. Dad stayed to help my grandfather and uncle the next day. Because Dad was driving the truck, my deer stayed with him. My cousin Tim and my Uncle Jeff left with their deer.

When I got home I was exhausted. It had been a busy day. I brought my things in, put them away and then went to bed. As soon as my head hit the pillow the day's events went rushing through my head. I kept thinking of my deer, seeing it running, and remembering pulling up the gun and shooting. I also remembered everybody's reaction when they saw my deer. I thought about how great that deer once was. How big he was, and how all of the other deer had to have had a certain kind of respect for such a great animal. Yes, he certainly was the "King of the Mountain."

Then I heard my dad's voice downstairs. I concluded that he had decided to return home earlier than planned, and then my mind quickly returned to previous thoughts. I was finally getting used to the idea that I actually did get such a great animal. I was very much looking forward to school the next day to compare my story with all of the male hunters. They had bragged so much the

one step forward only to be pulled back two. Next, three of us tried, while my sister carried three rifles, but we didn't make much headway. Then my dad and little brother appeared. Then Dad took my position at pulling and I went up the hill to my tree to get my things together. I stepped off the distance from my tree to the spot. I counted 87 steps which, to make it sound a little better, I rounded up to 90 yards—close enough! After that, my dad and I, with help from my little brother, started the down hill drag. And I had thought this would be the easy part. Ha! We stopped halfway down the trail to show my grandfather. He congratulated me and we continued on. At the bottom of the hill we met a few more hunters of the male variety. It made me extremely happy to find that in the whole group they had gotten only two deer and neither could compare with mine. After putting my deer into the back of our Bronco we headed for camp.

When we arrived Aunt Vicki and my grandmother came running out. They were so excited. I think they were more excited than I. It still hadn't quite sunk in that I had gotten one. After hugging everybody and hanging my deer beside my father's, my cousin



last time I saw them about the deer they were going to get.

Then I heard Dad's voice boom loudly, "Jen!"

I sat up slowly and walked down the steps.

He looked at me and said, "Someone stole your deer."

I looked at him and said, "Dad, that's not funny."

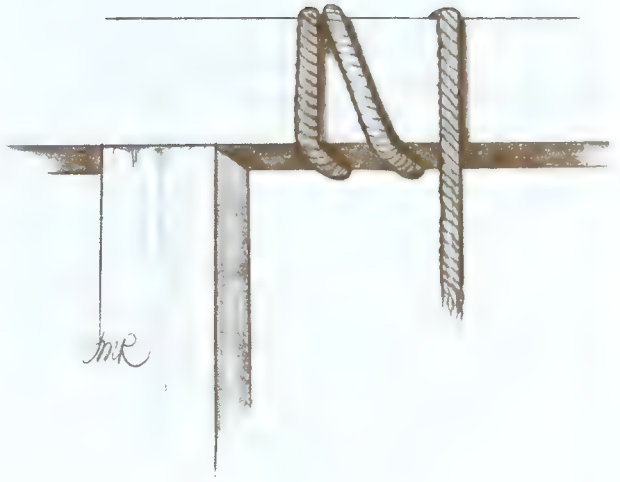
"Jen," he said, "I wouldn't lie to you."

Tears filled my eyes. Dad hugged me and explained. They had gone for milk for the next morning's breakfast, leaving the cabin well lit and with two vehicles parked right by it. They thought things would be safe. On the way there they talked about what they would do with the deer the next day. They didn't want to leave the deer out for fear of someone stealing them. They then went on to the subject of how a long time ago people used to put nickles under a deer's hide so it could be identified later. It was almost as though their talk was a kind of warning.

When they returned they saw only one deer hanging. They could tell right away which one was missing. The person who took it had cut the rope. The men from our camp immediately went out to look for the deer, but had no luck. Dad knew he had to come home to tell me. I began to shake all over, becoming more and more angry at the thieves who were responsible. Mom and Dad both tried to console me, but I was too mad for that. I was angrier than I had ever been in my life.

The news spread quickly. My Aunt Julie called to see how I was doing. After I calmed down considerably, I went upstairs to bed. I didn't sleep. I stayed up half the night, crying and thinking of how thoughtless a person must be to commit such an act.

When morning finally came my eyes hurt from crying and lack of sleep. My muscles ached from pulling the deer down the mountain and my pride was greatly injured. It all seemed so useless now. All that hurt for nothing. Mom, Dad and I went to the cabin to look for any clues of who took it, or even the tag.



We thought they would at least leave that behind. When we arrived at the cabin all that was left was the cut rope hanging from the porch roof. They left nothing. Everything was gone, including the last bits of pride and joy inside me.

I returned home and went with my Aunt Julie, who had already written an editorial directed to the persons who stole my deer. My grandfather also wrote one offering a reward to anybody giving information leading to the identification of those responsible.

### Hollowed Out

I took my deer in Tyrone Township, Perry County. It was unusual in that one of its 7 points was hollowed out. I can only hope that the person or persons who stole my deer needed the meat. I hope it was not just for the satisfaction of stealing something from a fellow human. At this point I have much more respect for that deer than I do for some people. No matter how I try to justify the theft of my deer, I find it impossible to find an excuse for the thieves. I am very lucky to have a great family that stood behind me and helped me through this crisis. Even though somebody may be sitting somewhere, bragging about his 7 point and how he got it, he can't steal the memories of my buck, my "King of the Mountain".



# FIELD NOTES



## Following Its Instincts

**HUNTINGDON COUNTY**—Last June I found a golden-winged warbler nest containing five young, and nearby, a field sparrow nest containing four eggs which apparently weren't viable. The next morning I observed the warbler nest from a blind, and I was quite surprised to find that the first bird to bring food to the nestlings was a field sparrow. As soon as the sparrow finished feeding the young warblers, the female warbler arrived with more insects. This went on throughout the morning. While such behavior is not unheard of, don't be surprised if you find some huge, overweight warblers around here.—WCO Rob Criswell, Huntingdon.



## More Efficient

**CLINTON COUNTY**—Last spring a pair of robins nested in a spruce tree only eight feet from my bedroom window. After the four youngsters hatched I watched the parents make countless trips to feed the nestlings. Normally an adult would return to the nest with a single insect, but on one occasion I observed (and photographed) the adult male with six caterpillars in its beak.—WCO John Wasserman, Renovo.

## Sure Were Lucky

**LUZERNE COUNTY**—A week after spring gobbler season closed I was searching for a roadkilled deer when I came across a gobbler and a hen standing at the intersection of a dirt road and a busy highway. Thinking I should chase the birds to a safer location, I pulled to the side of the road. To my surprise, the two birds came running towards me and, even more surprising, when I got out of my car, the turkeys stood around me as if we were old friends. The situation really got embarrassing when traffic was stopping to take in the spectacle. I finally took a long walk in the woods, with my two new companions hot on my heels. When I thought they were a safe distance from the road I ran back to my car and left. I learned later that the two birds had been raised—illegally—in captivity and then released, but I'll never understand how the gobbler made it through the hunting season.—WCO Donald R. Burchell, Dallas.

## New Opportunities

**SCHUYLKILL COUNTY**—Black bears are being sighted here almost weekly, and with the bear season just around the corner, many local sportsmen are excited about the good prospects of bagging a bruin in a county which not too long ago had none. Good luck, everyone.—WCO Steve Hower, Tremont.

## Be Considerate

**JEFFERSON COUNTY**—With the "spotlighting season" now in full swing, keep in mind that your discretion and courtesy while using a spotlight will determine the future of this pastime.—WCO Kenneth Packard, Reynoldsville.



## Pennsylvania's A Bargain

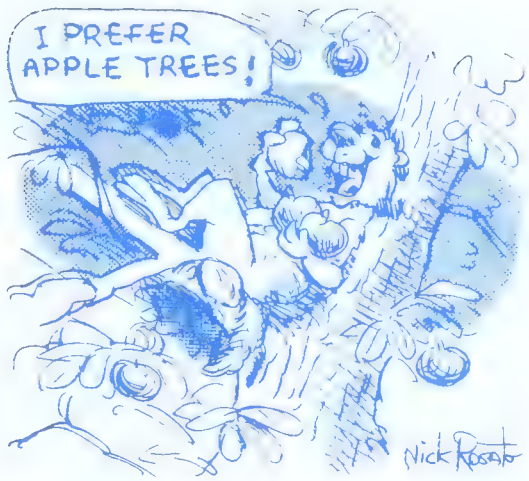
**SOMERSET COUNTY**—While hunter-trapper education coordinator Gary Compton was planning a spring turkey hunt in South Carolina he called about their license fees. The nonresident license fee seemed reasonable, \$50 for a ten-day license. But then Gary learned he also had to buy an \$80 big game tag, and that if he wanted to hunt on a wildlife management area, which is like our state game lands, then he had to pay an additional \$76 fee. If you're wondering what South Carolina residents pay, its \$12 for a license, \$40 for a big game tag, and \$35 for access to state land. —WCO John G. Smith, Salisbury.

## Don't Count On It

On our vacation last summer we visited a relative who lives in one of many housing developments located on the shore of a large reservoir. The lawns around the homes were lush, green and weed free, and during my stay I saw several lawn care services spray countless gallons of chemicals on the properties. I hope for our sake and the lives of our children that our hatred of dandelions and the quick and easy chemical solution doesn't come back to haunt us. —LMO Barry Zaffuto, Ebensburg.

## Some Name

**YORK COUNTY**—The Envirothon, sponsored by the Conservation District—and, in this county, also by the Izaak Walton League—pits teams of high school students against one another in a friendly competition concerning their knowledge about wildlife, fish, soils, water and other environmental aspects. As in all forms of competition, winning efforts are often largely due to good coaching, and in our county Envirothon, the Red Lion team usually finishes on top, thanks to coach Sandra Cooley. This year Sandra and her team, "The Red Lion Roadkills," finished first among 15 teams. Nice going, Sandra. —WCO G.J. Martin, Spring Grove.



## Good Climbers

**WAYNE COUNTY**—Last summer quite a few people reported seeing woodchucks in trees. I explained that although it's somewhat unusual, woodchucks do climb trees. I've seen them do it several times myself. However, if they ever learn to build dams or gain a fondness for honey, we'll be in big trouble. —WCO John Shutkufski, Damascus.

## Share The Wealth

**PERRY COUNTY**—With so many youngsters now being raised in single-parent households, why not do something for yourself, the sport of hunting, and future generations by "adopting" a young person who would not otherwise get an opportunity to hunt? You'll find that it's an excellent way to give something back to an activity that has given you so much. —WCO Jim Brown, Loysville.

## Check It Out

**CLEARFIELD COUNTY**—On a drive through SGL 90 last May, regional forester Paul Augustine counted 33 grouse and—before he finally lost count—70 deer. Considering that he could count only what was visible near the road, I've got to suspect that this game lands is teeming with game. If you're looking for a new place to hunt this year, consider SGL 90—WCO Colleen M. Shannon, Luthersburg.

## Unfamiliar

**WYOMING COUNTY**—WCO Keith Snyder and I conducted a program for high school students at an Envirothon at Keystone Junior College in Factoryville. The test we made up had 50 questions about wildlife, and for five of them students were asked to identify from recordings the songs of some common birds. I was surprised to discover that most of the 80 students couldn't identify the sounds of a European starling. The lesson I learned from this is that we really do take wildlife for granted to some degree, even when we try our best not to.—WCO William Wasserman, Tunkhannock.

## Lot of Banding

**CRAWFORD COUNTY**—Last July Mark Lindberg, a student at Cornell University, and his crew captured and banded about a thousand Canada geese as part of a research project he's conducting at Pymatuning.—WCO Dave Myers, Linesville.

## Strange Country Cousin

Last year I wrote a Field Note about a particular log that had been used for drumming by one grouse or another every spring for several years. Since then I've received countless inquiries from people wanting to observe this spectacle. For obvious reasons, I've never divulged the log's location. But when I checked on it one day last spring, I found not only the drumming grouse, but an audience, too. Not more than 30 feet away were four pheasants—a cock and three females—which seemed to be watching the drumming grouse with a fair degree of interest.—LMO Jerry Becker, DuBois.

## No, A Hen

I was vacationing at Myrtle Beach and having lunch at a fast food restaurant when I overheard the following comments as a pair of mallards picked up crumbs from the patio. "Oh, look at the ducks. Is that brown one a doe duck?"—IES B.K. Moore, Saltsburg.

## Or All Of Them

**WESTMORELAND COUNTY**—On a drive to New Orleans last summer I saw dead on the highways a cattle egret, a fox squirrel, two opossums, a raccoon, and a turtle. If those roadkills along 1200 miles of highway are any indication of what's in the woods, then Pennsylvania has more wildlife than any state between here and the Gulf of Mexico.—WCO R.D. Hixson, Ligonier.

## Got A Break

With all the rain last spring and summer, many hayfields remained unmowed until well after pheasants and other wildlife were through nesting. Therefore, this could be one of the best small game seasons we've had in some time.—LMC Keith Harbaugh, Meadville.





## Golfing Terms

**CENTRE COUNTY**—Not long ago former Penn State University President Eric Walker shot an eagle on PSU's White Golf Course. After his feat was publicized, a woman called Eric, said he should be ashamed of himself for shooting an endangered species, and then promptly hung up on him. I also received several calls on the matter, but I explained to each caller that aside from being a golfer, Eric is an avid outdoorsman and naturalist, and that he would never harm even a little birdie, let alone a majestic eagle. —WCO Joe Wiker, State College.

## You Got That Right

**BEDFORD COUNTY**—Lynn Karns and I got into a lively discussion at the Juniata Sporting Goods store concerning what is the best gun for deer hunting. In the end, we concluded that it is not the caliber of the gun that's important, but the caliber of the hunter using it. —WCO Dave Koppenhaver, Everett.

## Small Consolation

**BLAIR COUNTY**—Last May Richard Wyland, Gallitzin, hit a deer with his vehicle and suffered \$1000 in damages. After his car was repaired he hit a bear and again received considerable damage. At the rate Rich is going, I think the Game Commission should look for an old "Triple Trophy Award," just in case a turkey crosses Rich's path. —WCO Don Martin, Hollidaysburg.

## Glad To Do It

During our big game measuring session last April a man walked up to me and said he just wanted to thank the Game Commission for our bear management program in the Southwest Region. People often tell us when they think we're doing something wrong, but seldom do we hear from anybody when things are going right. So, Mr. Sportsman, thank you and you're welcome. —LMO R.B. Belding, Waynesburg.

## Big Ambitions

**LYCOMING COUNTY**—A local fellow was attending a family picnic when an unusual splashing sound was heard coming from the nearby stream. On investigation he found a fawn in the water with a mink biting at its face and nose as if it was trying to kill it. —WCO Daniel Marks, Williamsport.

## Smell The Roses

**GREENE COUNTY**—Any time you think things aren't as good as they were in "The Good Old Days" take a look at our annual big game harvest figures. There's plenty of game around, most of our programs are working well. Smile, it's not all acid rain and oil spills. —WCO R.P. Shaffer, Carmichaels.



Nick Rosato

## And Eye

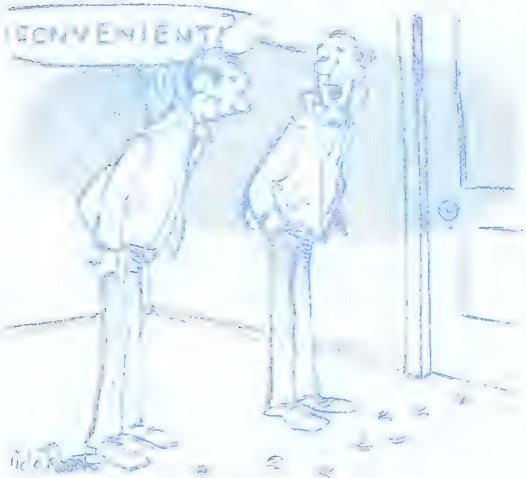
**CAMERON COUNTY**—For the past seven years my old tom cat has accompanied me for every one of my daily firearms practice sessions. He lies at my feet when I shoot my pistol and near the gun muzzle when I practice with the service rifle. The old cat has heard literally hundreds of thousands of rounds, from 38 target ammo to full service 308s. As might be expected, the cat is going deaf. There's a lesson to be learned from him, however. Hearing loss is irreversible. So when shooting at the range, even just a rimfire, always wear proper ear protection. —WCO Joe Carlos, Driftwood.

## Plentiful

**WASHINGTON COUNTY**—With the county's antlerless deer harvest being 44 percent higher in 1988 than it was in 1987 I had high hopes the number of deer damage complaints and roadkills would go down. Well, I wasn't so fortunate. Calls about deer damage are still pouring in, and the number of roadkills is higher than ever. When will it ever end? — WCO R.M. Hough, Washington.

## Big Time Saver

Several people have expressed skepticism at our use of the Royer Woodsman for creating wildlife habitat, but you'll hear no complaints from me. I had the machine working on the Conemaugh Flood Control Area and accomplished more in two months than my crew could have done by hand in 20 years. — LMO R.H. Muir, Kittanning.



## Convenient

I recently went with a friend of mine to look at a piece of property he was considering buying. With both of us interested in wildlife, we were glad to see plenty of animal sign on the property. Before we left we decided to inspect the old house. Upon entering we heard a loud noise in the kitchen and then discovered that a deer had just left through the back door. Like I told my friend, "You won't find deer hunting any closer to home than that." — LMO James Deniker, Sandy Lake.

## Sick Bird

**MERCER COUNTY**—I attended a family gathering last summer and, as often happens, I got into a discussion about the Game Commission. Somebody asked me the difference between unlawful and illegal. I couldn't imagine why he was so interested in legal terminology, and I had to admit I didn't really know what the difference was. His response was, "And you call yourself a game warden. Everybody knows unlawful means against the law and ill-eagle is a sick bird." — WCO Donald Chaybin, Greenville.

## Still Going Strong

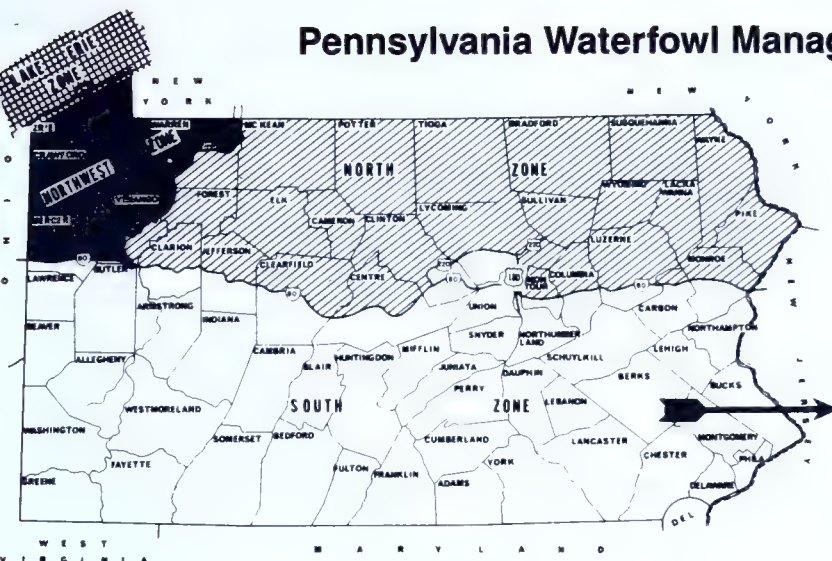
**ELK COUNTY**—A year ago many sportsmen were concerned that the agency's bonus deer program would greatly reduce the local herd. Well, checking my roadkill figures, I found that I picked up 13 percent more white-tails during the first five months of this year than over the same time period last year. Furthermore, the reproductive rate was higher this year than in any of the other four since I came here, and I've been seeing a lot of deer while patrolling. Believe me, our deer population is as healthy as ever. — WCO Dick Bodenhorn, Ridgway.

## So There, Sis

**UNION COUNTY**—Not long ago, before releasing a bear I had trapped, I took it to the Mifflinburg Middle School to give the outdoor education students a chance to see the animal and learn about the agency's bear management program. Several days later I received a packet of letters from the teacher, Ms. Shirley Bingaman, and her students. I certainly enjoyed reading the comments, especially one in which a young lady said, "I really enjoyed seeing the bear because, finally, I saw something my sister didn't see when she was in fifth grade." — WCO Bernie Schmader, Millmont.



## Pennsylvania Waterfowl Management Zones



## 1989 Waterfowl Seasons, Bag Limits Proposed

**E**FFECTS OF THE prolonged Canadian drought and declining waterfowl numbers continue to be reflected in 1989 seasons and bag limits proposed by the Game Commission—within the framework set up by the U.S. Fish and Wildlife Service.

Again this year, Pennsylvania will have 30 duck hunting days and reduced daily and possession limits of three and six birds. Prior to 1988, Pennsylvania was permitted 40-day duck seasons, with a daily bag limit of four.

One liberalization is permitted this year: waterfowl hunting may start one-half hour before sunrise; last year, shooting was prohibited before sunrise.

Federal waterfowl figures indicate

Pennsylvania's duck harvests declined 29 percent last year, resulting in a mid-winter population increase. This is in contrast to the national picture, which shows near-record lows in breeding duck populations.

Breeding duck populations in all United States and Canada survey areas this spring were under 31 million, 8 percent lower than 1988 and 24 percent below the 1955-88 average.

From Pennsylvania northward in the Atlantic Flyway ducks continue at adequate, stable levels. Areas to the south and west, however, continue to show fewer birds due to drought and habitat loss, and as a result, shorter seasons and reduced limits continue to be required in all states.

Pennsylvania's proposed 1989 seasons are summarized as follows. Watch for official seasons in local newspapers.

*Canvasback and Harlequin ducks:* no open seasons.

*Black ducks:* North Zone Nov. 1-14; Lake Erie and Northwest Zones Nov. 9-25; South Zone Nov. 20-Dec. 13.

*Other ducks:* North Zone Oct. 16-Nov. 14; Northwest Zone Oct. 16-28 and Nov. 9-25; Lake Erie Zone Nov. 9-25 and Dec. 14-26; South Zone Oct.



23–28 and Nov. 20–Dec. 13.

*Canada, snow and blue geese:* North, Northwest and Lake Erie Zones Oct. 9–Dec. 16; South Zone Oct. 16–Dec. 23; Southeast special 90-day zone Oct. 16–Jan 13.

Bag limits for 1989 are:

Three ducks daily, possession limit of six, but not more than one hen mallard, one black duck, one mottled duck, one pintail, one fulvous tree duck, two wood ducks or two redheads daily; not more than two hen mallards, two black ducks, two mottled ducks, two pintails, two fulvous tree ducks, four wood ducks or four redheads in possession.

Mergansers—five daily, but only one hooded merganser; possession limit is ten—hooded mergansers, two.

Coots—fifteen daily and a possession limit of thirty.

Canada geese—three daily, except in Butler, Crawford, Erie and Mercer Counties, where the daily limit is two, and the controlled shooting areas at Pymatuning and Middle Creek Wildlife Management Areas, where the limit is

one goose; the possession limit is double the daily limit (except at Pymatuning and Middle Creek, where it is one).

Snow and blue geese—three daily (any combination); possession limit is six.

Critically-depressed populations led the Fish and Wildlife Service to continue the closed season on canvasbacks, as well as institute a closed season on Harlequin ducks—sea ducks seldom seen in Pennsylvania. Lower numbers of birds also led to reduced limits on pintails, mottled and fulvous tree ducks. Under this year's federal framework, all bonus ducks and special seasons (including teal and scaup) continue to be eliminated.

Season and bag limit restrictions imposed last year by the Fish and Wildlife Service and repeated again this year are not expected to be quickly relaxed. Biologists believe it will take up to five years for waterfowl populations in the prairie pothole country and the Canadian duck factories to recover from lack of rainfall and habitat destruction in the 1980s.

# 1989 Pennsylvania Waterfowl Seasons

## LAKE ERIE ZONE

Black Ducks—Nov. 9 to 25

Other Ducks, Sea Ducks, Coots, Mergansers—Nov. 9 to 25 and Dec. 14 to 26

Geese—Oct. 9 to Dec. 16

## NORTHWEST ZONE

Black Ducks—Nov. 9 to 25

Other Ducks, Sea Ducks, Coots, Mergansers—Oct. 16 to 28 and Nov. 9 to 25

Geese—Oct. 9 to Dec. 16

## NORTH ZONE

Black Ducks—Nov. 1 to 14

Other Ducks, Sea Ducks, Coots, Mergansers—Oct. 16 to Nov. 14

Geese—Oct. 9 to Dec. 16

## SOUTH ZONE

Black Ducks—Nov. 20 to Dec. 13

Other Ducks, Sea Ducks, Coots, Mergansers—Oct. 23 to 28 and Nov. 20 to Dec. 13

Geese—Oct. 16 to Dec. 23

Geese—that area east and south of the following boundaries: Interstate Route 83 from the Maryland line to Harrisburg, I-81 from Harrisburg to Route 443, Route 443 from I-81 to Lehigh, Route 209 from Lehigh to Stroudsburg, I-80 from Stroudsburg to the New Jersey line; also, on and within 25 yards of the Susquehanna River from Harrisburg to Northumberland—Oct. 16 to Jan. 13.

Atlantic Brant—all zones—Oct. 16 to Dec. 4



# **NO OPEN SEASON — CANVASBACK AND HARLEQUIN DUCKS & SWANS**

## **BAG LIMITS**

Ducks—3 daily, 6 in possession; daily limit may not include more than: 1 hen mallard, 1 black duck, 1 mottled duck, 1 pintail, 1 fulvous tree duck, 2 wood ducks, 2 redheads; possession limit may not include more than: 2 hen mallards, 2 black ducks, 2 mottled ducks, 2 pintails, 2 fulvous tree ducks, 4 wood ducks, 4 redheads

Atlantic Brant—2 daily, 4 in possession

Coots—15 daily, 30 in possession

Mergansers—5 daily, 10 in possession; no more than 1 hooded merganser daily, possession limit of 2

Snow and Blue Geese—3 daily, 6 in possession

Canada Geese—3 daily, 6 in possession

### **EXCEPTIONS FOR GEESE:**

1. 2 Canada geese daily, possession limit of 4 in Butler, Crawford, Erie and Mercer Counties
2. 1 goose on the controlled goose hunting sections of the Pymatuning and Middle Creek Wildlife Management Areas

## **PYMATUNING, MIDDLE CREEK**

Pymatuning shooting dates—Oct. 9 to Dec. 9

Middle Creek shooting dates—Oct. 16 to Jan. 13, except closed Oct. 28 and Dec. 25 & 28

## **WATERFOWL SHOOTING HOURS**

One half hour before sunrise to sunset

### **EXCEPTIONS:**

1. 8 a.m. until sunset in the Northwest and North Zones on Oct. 9.
2. 9 a.m. until sunset statewide on Oct. 28, except in the Lake Erie Zone, where shooting begins one-half hour before sunrise and ends at sunset on Oct. 28.
3. Controlled shooting sections of Pymatuning Wildlife Management Area: 8 a.m. until 1 p.m. on Oct. 9; 9 a.m. until 1 p.m. on Oct. 28; on other shooting days (Mondays, Wednesdays, Fridays, and Saturdays), one half hour before sunrise to 1 p.m.
4. Controlled shooting section of Middle Creek Wildlife Management Area: one half hour before sunrise to 1:30 p.m. on Mondays, Tuesdays, Thursdays, and Saturdays.

## **NON-TOXIC SHOT REQUIREMENT**

Non-toxic (steel) shot must be used to hunt waterfowl in Pennsylvania.

# **39,143 Roadkills in 1988**

**A**CCORDING to Game Commission tabulations, 39,143 deer were killed on roads last year, an increase of about five percent over 1987.

Leading counties in recorded highway kills were Erie, 1501; Luzerne, 1375; Westmoreland, 1374; and Allegheny, 1336.

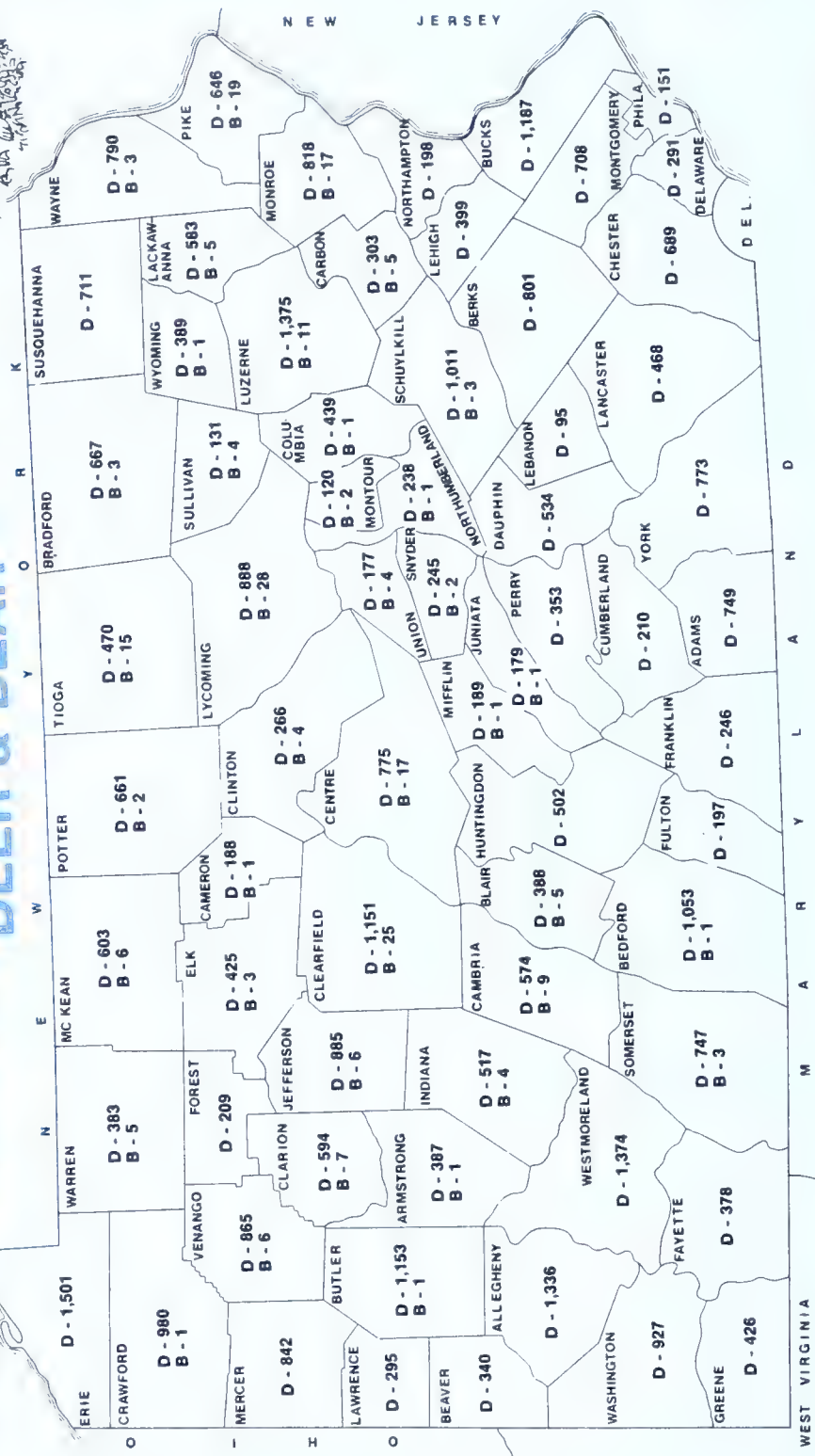
Vehicle-killed bears also increased in 1988. Last year 233 bears died on high-

ways, up from 166 in 1987.

Known out-of-season deer mortality for the year totaled 45,459, including 3385 killed illegally, 2100 taken for crop damage and 278 destroyed by dogs. Wildlife conservation officers recorded a total of 315 bears lost out-of-season, including 34 killed illegally, 27 destroyed for crop damage and 21 attributed to other causes.



# 1988 RECORDED HIGHWAY MORTALITY DEER & BEAR



TOTAL DEER MORTALITY ..... 45,459  
TOTAL BEAR MORTALITY ..... 315

DEER (SYMBOL - D)	
HIGHWAY	39,143
ILLEGALS	34
CROP DAMAGE	2,100
DOGS	278
OTHER	553

BEAR (SYMBOL - B)	
HIGHWAY	233
ILLEGALS	34
CROP DAMAGE	27
DOGS	0
OTHER	21



# Take A Walk

ONE OF THE BEST, and worst, things to happen to bowhunting was the development of the portable, climbing tree stand. It has helped archers harvest more deer, but it has not made them better hunters.

Speaking as a bowhunter who's toted more than her share of folding tree stands, hand climbers, and safety belts into the woods, this may seem a contradiction. But sheer numbers of deer tagged do not necessarily add up to top-notch hunting skills. Make no mistake, I do believe in the value of the tree stand. Anyone who has bowhunted knows the odds are highly stacked against them and in the deer's favor. A tree stand just reduces the disparity by a point or two.

Many of those who entered the sport of bowhunting after the advent of the portable stand may know nothing else. Due to their birthdays arriving after mine, or their interest in the sport blooming later, they jumped into archery in what I'd consider the "middle." They "grew up" with the compound bow and its corollary, the portable tree stand. They've read all the "expert" advice in today's many bowhunting publications, and they figure it all adds up to this: take your bow into the woods, climb a tree, wait for a deer to pass by, and shoot it.

The irresistible thing is, this advice works. Many archers who consider themselves successful hunters have tagged many deer with this formula. I contend that they are good shots, patient, and can climb trees, but by not going out into the woods on foot, they're missing the best part of the sport. The tree stand is effective, but we archers still need to reaffirm, to the experts and each other, our "right to roam."

Let me give as example one bowhunter who traveled with our archery club to hunt in another state. The first day found him loaded down with all the accessories of the modern well-dressed archer—stand, belts, scents, rattling

antlers, thermos and lunch, not to mention a fully outfitted compound bow. He didn't know the woods, so he walked straight in and up a little rise. About then he ran out of steam and stopped to wheeze. The tree he leaned against happened to be just right in diameter and straightness for his climbing stand. So he ran it up right there, hauled in his gear, and stayed for the day.

As the rut was starting, and as there were other archers going to stands or still hunting, he saw deer from his perch. He might have even missed one, I'm not sure. After that day, this archer made many trips to the area to hunt, and each time he did the same thing: stood on stand in the same tree.

## Most Vital Part

He may have taken a deer from that stand eventually, I don't know, as I lost touch with him. But from my point of view, he missed the most vital part of the hunt: knowing how game relates to the woods, and the woods to game, and using that tool to be successful. As far as I know, this archer never took the time to get down on the ground and look around.

Tree stands are a powerful lure because they put a hunter above the deer's normal line of sight. Today's models are easier and safer to use than ever, without worry about damage to trees. It's true they help archers harvest more deer, but is that what the sport's entirely about? If a bowhunter never gets out of

## Another View...

by Linda Steiner



**PERSONALLY**, I'm not an all day stander, not on the ground, and certainly not in a tree. I spend the critical first and last few hours on stand, but the rest of the time I indulge in my penchant for roaming.

Bob Steiner

archers consider 20 yards and under to be the ideal killing distance). But on the ground, that radius enters another dimension. It moves lengthwise as we travel. Sometimes, that advantage alone is worth coming to earth for. Of course, it also puts a hunter back in the deer's arena, where his motion is at the animal's eye level.

All but the most fanatical bowhunters are not always archers. In other seasons, they are small game shotgunners, big game rifle shooters, and more. Few of them have the time for unlimited pre-season scouting as the opening day for each species nears. They often use time in one season to watch for the sign or presence of game they'll be hunting in the next. Wandering the woods bow-in-hand, still-hunting if you will, is doing double duty.

Personally, I am not an all day stander, not on the ground, and certainly not in a tree. Perhaps this is a hunting weakness, but I think not. I make sure I spend the critical first and last few hours of the day on stand, because I know that gives me the highest odds for success. But the rest of the time I indulge in my penchant for roaming. Sometimes I discover new, and better, spots for my stand, sometimes I get shots, but most often, I just fill up the midday hours with a lot of what I go hunting for.

Archers should no longer be made to feel they're wasting time when they're on the ground. It isn't true that all the "real" hunters are up in the trees. It is not only possible to be successful on the ground, but I believe investigating the forest afoot is necessary to being a better, more satisfied hunter. Bowhunter, get out of your tree and walk.

the branches for a "look see," what kind of woods and wildlife knowledge will he have? Isn't the acquisition of that as important, as fulfilling, as much fun in the long run, as mere "horns" on the wall?

Some archers may counter with, "But I do scout from the ground preseason." I say, "That's not enough." Consider the difference in the forest, as well as in the biology of deer, between late September and late October. Food sources undergo a drastic change, whether the cover hunted is deep woods, where acorns and beechnuts are falling, or farmland, where crops are being harvested. Patterns of deer usage are revised not only with the foods of the new season, but with the oncoming rut. From one, or even a handful of trees, how can a hunter hope to see everything?

The main problem with tree stands is that trees don't have feet. When in a tree, we are restricting our hunting world to a circle 40 yards across (most



# Fun Games

## “Ruffly Speaking”

By Connie Mertz

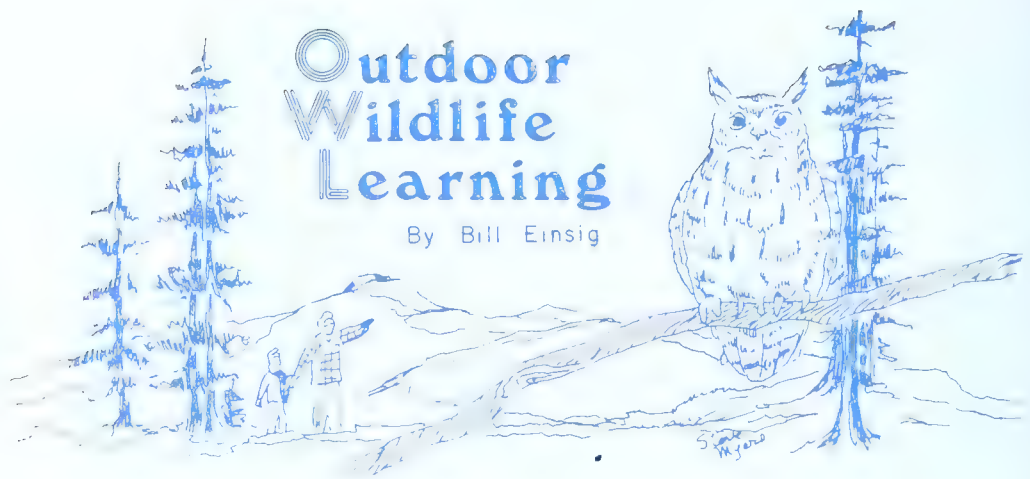
Choose the correct answer to complete each sentence. Then place the letter of your choice in the space below and unscramble the letters.

1. The ruffed grouse has been Pennsylvania's state bird since (N) 1931 (E) 1898.
2. A favorite summertime food of the grouse is (A) acorns (I) insects.
3. Hens perform this to protect their chicks. (B) broken wing act (C) clucking loudly.
4. Grouse are related to (T) turkeys (S) songbirds.
5. One way cocks attract a mate. (S) singing (D) drumming.
6. Grouse have excellent (E) eyesight (S) smell.
7. Grouse also have a good sense of (H) hearing (T) touch.
8. A favorite habitat for grouse is (O) open fields (U) underbrush.
9. The ruffed grouse is colored (R) reddish brown (B) black and white.
10. Its name comes from a (R) ruff of black feathers around the neck (B) a band of black around its tail.
11. Grouse mortality is more often due to (N) natural disasters (D) diseases.

---

Unscramble these letters to discover another name for the ruffed grouse.

*answers on page 64*



# A Guide to Field Guides

**B**UYING A field guide to wildflowers should be easy. Bookstores typically carry several that help amateurs identify the most common flowers, and buyers usually have a wide choice of guides with different features. The problem may be that there are too many from which to choose!

Most of us simply want a field guide that will quickly, and accurately, give us the name of almost any flowering plant we find. That's unreasonable, though, because there are just too many species to include. There are thousands of kinds of flowering plants, and a field guide that included them all would be the size of a major city phone directory. In fact, the most comprehensive field guides include fewer than 1500 species descriptions. Therefore, no field guide can include all types of wildflowers, but one that includes many specimens may be better than one with fewer species.

How does the user sift through more than a thousand species to find one particular flower? Even more important, how can this be done quickly, say, within a few minutes, before the user's frustration level overwhelms his curiosity? Field guides need a logical system that directs the user to the appropriate page, or section, where the unknown flower is covered. Almost all field guides have such a system, but some are better than others.

Usually, the user doesn't bother with the system anyway. Most field guides are used as simple picture books where the user scans through the book comparing pictures to the specimen in hand. Some-

times that works; often it doesn't, and the user throws up his hands in frustration.

Two of the most important characteristics, then, to look for in a field guide are the number of species included and the system the book uses to get you where you want to go. Clear, accurate illustrations and text content are also important. Most field guides use uncolored drawings and varying numbers of color plates. Some guides include little or no descriptive text while others include a paragraph of essential information that might be as important to the plant identification as the illustration itself.

Finally, the user has to choose the book and identification scheme that fits his own needs and working style. It is important to feel comfortable with the book and to be very familiar with its organization. Jumping from book to book without ever mastering one is likely to slow your work and limit your enjoyment.

## Some Comparisons . . .

*A Field Guide to Wildflowers*, Roger Tory Peterson and Margaret McKenny, Houghton Mifflin, Co.

This popular guide includes nearly 1300 species with an even greater number of superb illustrations. The book uses a basic system of grouping flowers by color: white, yellow orange, pink to red, violet to blue, green and brown. Within these groups, flowers may be clustered according to flower form or habitat.

There is no systematic key. The user must flip through many pages of the ap-



appropriate color section to find a given plant. For example, there are about a hundred pages containing plants with white flowers, but within that group you must flip until you see plants like the one you're after. Other observable characteristics are used but only after the user gets to a particular page.

*Wildflower Guide*, Edgar T. Wherry, Doubleday & Co., Inc.

Even though this book contains only 384 species it has been a long-time favorite of mine, probably because I've been using it for more than 20 years. It has a one-page key to flower families, and species are arranged by botanical groups. In this sense, it is closer to the formal arrangement found in comprehensive technical works. Users with some background in botany will be able to use this book quickly; those without such background should probably choose another book.

*The Audubon Society Field Guide to North American Wildflowers, Eastern Region*, William A. Niering and Nancy C. Olmstead, Alfred A. Knopf, New York.

This book is divided into two distinct sections: illustrations and text. The illustrations are arranged by color and, within color groups, by flower form. Small graphic symbols on convenient thumb-tabs indicate groupings of similar flowers.

Again, there is no systematic key to help you pinpoint the exact illustration. The user determines the appropriate color group, narrows that somewhat with the flower form, and then flips through the illustrations until finding a match. The text provides a more complete description of the plant, along with notes on its range, habitat and flowering dates. Obviously, as with all field guides that depend on color grouping, if the plant is not in bloom, you're out of luck.

A most noteworthy feature of this field guide is that the illustrations, more than 650 of them, are all photographs. Most field guides depend on the detailed accuracy of line drawings which can show more plant characteristics. The photographs in this book, however, are excellent and provide a closer match to the real thing than any line drawing can provide, even if they do tend to be incomplete by not showing all parts of each plant.

*Newcomb's Wildflower Guide*, Lawrence

Newcomb, Little, Brown and Co., Boston, 1977.

Newcomb's book will probably become my new favorite simply because of his ingenious key. If you can clearly answer the following five questions about the specimen in hand, his key will take you to the page with an illustration of that plant.

Is the flower regular, irregular, or are the parts indistinguishable?

If regular, how many petals does it have?

Is the plant a wildflower, shrub or vine?

If it is a wildflower, are the leaves lacking, basal, alternate or opposite?

Are the leaves entire, toothed, lobed, or divided?

These terms are well defined and illustrated within the first section of the book, so almost everyone can quickly master them.

Here's how the system works with black-eyed susan as an example. The chart on the inside front cover helps me to first find a three-digit group number for my plant. My flower has more than 7 regular parts so the chart says my first digit is 7. It is a wildflower and has alternate leaves therefore my second digit is 3. Finally, the leaves are slightly toothed, so the last digit is 3. My group number is 733.

Next, I find that group number in the Locator Key, make a few simple choices and am directed to page 374. There I find black-eyed susan and several other similar species to which I can compare my specimen. True, I had to be observant and use the system, but I didn't have to thumb through several dozen pages looking at all sorts of yellow flowers.

The secret in using this system quickly is to become familiar with the terms and learn to interpret characteristics the same way the author did. Those skills come only with practice.

*Flowers: A Guide to Familiar American Wildflowers*, Herbert S. Zim and Alexander C. Martin, Golden Nature Guide, Simon & Schuster.

It would be difficult to bypass the Golden Nature Guides, even though some feel they are too elementary to be taken seriously. I don't feel that way because they've proven their value many times. Their small size, low cost and ease of use make them perfect companions for the casual walker. The 134 painted illustrations and 200 species descriptions cover the most common wildflowers you're likely

to see in Pennsylvania. It's perfect for beginners and always a good purchase.

*Flower Finder*, May Theilgaard Watts, Nature Study Guild, Box 972, Berkely, CA 94701.

This little guide is only 64 pages long and includes fewer than 200 species. It includes only spring-flowering wildflowers so its use is limited to that portion of the year, but it is unique.

The entire booklet is actually an identification key based largely on pictorial symbols for family names. The illustrations of the species themselves are sketchy but adequate. There are no text descriptions or notes on range, habitat or characteristics other than those in the key itself.

The guide is the perfect introduction to dichotomous keys for students. After using this system, the jump to more comprehensive keys will be much easier.

## **GAMEcooking Tips**

### **Great Side Dishes Make the Meal**

Whether you prefer dining out or eating at home, meals center around the main dish. But what separates a good dinner from an outstanding one, to us, are the side dishes. Attention paid to vegetables and starches add an extra "kick" which we like. Over the years we have discovered and developed some outstanding side dishes that make any meal special, but especially lend themselves to game birds.

The following recipes suggest an entire meal, with mashed potatoes and a salad that can be prepared a day ahead, which is just short of a miracle for the busy cook. I hope you try them and enjoy them as much as my family has over the years.

#### **Coopersburg Goose Breasts**

- 2 whole goose breasts, boned
- ½ pound chipped beef
- 6 strips bacon, diced and fried crisp
- 1 can mushroom soup (10½ oz.)
- ½ pint sour cream
- 1 cup mushrooms, sliced

Cut goose breasts into bite-size chunks and arrange in the bottom of a greased baking dish. Shred the chipped beef and sprinkle over breasts. Top with bacon pieces. Combine sour cream and soup. Spread over the layers in a baking dish. Top with mushrooms. Cover and bake at 350 degrees for 1 to 1½ hours or until goose is cooked.

#### **Make Ahead Vegetable Salad**

- 2 cups raw cauliflower
- 1 pound green beans, blanched
- 4 ounces mushrooms
- 1 cup ripe olives
- 1 onion, sliced
- ½ cup lemon juice
- 2 tablespoons sugar
- 1 teaspoon dill
- ½ cup vegetable oil
- 2 cups shredded iceberg lettuce

Break cauliflower into bite sized pieces. Trim the ends off beans and chop. Slice the mushrooms and olives. Layer the vegetables in a large glass bowl. Top with the onion slices. Combine the lemon juice, sugar, dill and oil. Pour over vegetables. Refrigerate overnight. Top with shredded lettuce, toss and serve.

#### **Make Ahead Mashed Potatoes**

- 6 to 8 large potatoes
- 1 package cream cheese (8 oz.)
- 4 tablespoons butter
- salt to taste

Peel and quarter potatoes. Boil until tender. Drain. Immediately add cheese and butter to hot potatoes. Allow to stand until cheese melts (about 10 minutes). Beat with electric mixer until smooth. Refrigerate. Reheat on top of stove, stirring often, using low heat. Salt to taste. Serves six.

—Reprinted from FISH AND FOWL  
COOKERY, THE OUTDOORSMAN'S  
HOME COMPANION,  
Countryman Press,  
Woodstock, VT  
BY CAROL VANCE WARY



THE BRIGHT SILVER orb of September's moon had long since waned into a slivered crescent as Deputy Leonard Worden and I eased our patrol vehicle, unobserved, down a dark road in northern Tioga County. It was almost two weeks prior to the opening day of the 1975 raccoon hunting season. We were on a general patrol near the New York State line, looking for deer poachers or out-of-season coon hunters, whichever came first. It wasn't long before we came upon a car parked off the road by an adjoining corn field. Then we saw a flashlight flickering in the woods above the field. I hid the vehicle nearby, and Leonard and I stepped out into the chilly October night. As we walked across the cornfield I pulled my light summer jacket around my neck, trying to fend off the impending frost. The flashlight was still on, and the deep resonant baying of hounds drifted down from the hill. Soon a man could be heard calling in the dogs.

A corn picker had made a couple of passes along the fence row between the road and the woods. The upper half of the field by the woods had already been cleaned. We stood in the slot between what was left of the standing corn and the fence row, waiting to see what would happen next. Although the hunting season hadn't opened yet, it was permissible to train coon hounds. Should we move in on them or wait, we wondered. The hunters made up our minds for us. As we debated our strategy we noticed the flashlight beginning to move down toward us. Leonard stepped into the trees in the fence row and I ducked into the edge of the standing corn. Before long a big bluetick hound came trotting over to check us out. I scratched his ears and he trotted over to Leonard. It's a good thing dogs can't talk. As the flickering light neared the field I heard a gruff voice bark, "Shut off that light, there might be wardens around!" I smiled at that one. Presently, two dark forms came walking toward the slot between Leonard and me. I could see one carrying a gun over his shoulder. The other was carrying something by the tail in each hand.

When they came abreast of us, Leonard and I both snapped on our lights and I hollered, "Freeze, Game Commission officers!" Now I've learned to expect about anything to happen when I say that, and I'm normally ready. But I wasn't quite ready for their reaction. The man carrying the gun (which turned out to be a nice 22



### By Jack Weaver

Wildlife Conservation Officer  
Centre County

rifle) threw it across the stoney ground in front of him, spread his legs, placed his hands on the top of his head in the classic search position and started yelling, "Don't shoot! Don't shoot!" Definitely not a local, I surmised. The other man dropped the two raccoons as if they had just bit him and gawked, staring back and forth, at our lights. He was a local.

After I got the first man calmed down somewhat we learned he was from New York City. He told me that there, when an officer yells freeze, you better freeze. I liked that. I almost signed him up for a lecture tour of the local bars. The other man told me he had killed only one other raccoon out-of-season so far. He even took us down to his trailer and produced the other hide from his freezer.

Such poaching violations are particularly common when fur prices are up. In the mid-1970s fur prices began to soar, reaching an all time high in the early '80s. During that time I could never be sure what I might find during early October night patrols.

Just a few days before we caught those two violators, Leonard and I were patrolling near Mainesburg, and again we encountered a car parked along a corn field. The car belonged to a known violator; a woman was sitting inside. She said the men were just out training a dog. But just



## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

then the dog opened up on a treed coon in the adjoining woodlot. As we headed towards the woods a barrage of shooting erupted. The men were so intent on what they were doing that they never heard us coming. When we arrived at the tree they looked at us sheepishly with smoking guns in their hands. I asked them if they hit the coon. The known violator, typically, replied no. But just as that answer dropped off his lips the raccoon dropped out of the tree, riddled with holes.

Years later a trainee and I were patrolling my new district in Centre County on a frosty October night when we noticed flashlights working along Bald Eagle Creek. Soon a hound could be heard tonguing. We parked and proceeded to follow the lights, which were following the dog. About an hour later the dog barked treed, and the lights all converged at the base of a large sycamore that leaned precariously out over the creek on the opposite shore. A spotlight came on, one of those new pack-your-own battery types, and there was the coon backed out on a limb over the creek. There were three fellows in their late teens around the tree, throwing rocks, trying to knock the critter off the limb. Finally, one of the boys, goaded on by the others, decided to climb up after the coon. This oughta be good, I thought.

The raccoon backed out to the end of the limb and began growling and snarling. The boy in the tree backed down and began screaming for a club. But his buddies would have no part of that. They told him to stay there and shake the critter out. He shook until he almost shook himself out of

the tree, but he was too far away to disturb the coon. Egged on by his brave buddies on the ground, he began to edge farther out on the limb, toward the snarling coon. Meanwhile, the dog was going frantic, trying to lunge up the tree. One of the boys grabbed the dog's collar, but he quickly found he had his hands full. He started yelling for the one in the tree to start shaking because he didn't think he could hold the dog much longer. The lad in the tree yelled back, "If I fall, for Pete's sake hold on to that crazy dog or he'll think I'm the coon!"

Finally, he shook the coon loose and the other boy let go of the dog. A sudden commotion erupted in the middle of the creek, then the dog let out a yelp as the raccoon broke loose. A boy on shore grabbed a stick, leaped into the water, and began flailing at whatever moved, dog or coon. In the end, the raccoon lost, but so did the boys.

Not every such case involves poaching only a few raccoons. There were those who are just plain greedy. A much bigger case culminated with the issuance of search warrants in the town of Blossburg early one October morning. The persons involved were known violators. In fact, they liked to brag about it. Allegedly, they killed whatever they wanted, whenever they wanted.

A disgusted sportsman had informed me that these guys had been killing raccoons since September. It was now mid-October, a week or so away from the open season. Figuring we didn't stand a chance of catching them actually hunting, because they moved around a lot, we decided to stake out their homes in hopes of securing enough probable cause to get a search warrant.

It was one of those cold rainy nights that signals the end of Indian summer that found us waiting for them to return from a hunt. Deputy Leonard Worden again was with me. He positioned himself in a hedge by the driveway of the one suspect, Tom. Tom's buddy, Ski, lived just down the street, where I was biding my time under a small pine tree in his front yard in an attempt to stay dry. Despite the rain gear and my hiding place I was soon wet and chilled clear through.

About 11:30 that night Tom's truck stopped in front of Ski's house. Ski got out carrying a rifle and what looked like a large coon. I watched as he took it into a metal shed behind his house. When it was



clear I hurried down to find Leonard. He looked like a drowned rat. Through chattering teeth he told me that Tom hadn't brought any raccoons home. Two nights later we took up our usual positions, but at least it was only drizzling. That night I watched Ski get out of Tom's truck, in hunting clothes, and carry the rifle into the house. But he had no raccoons. I found Leonard by the hedge again. He said that he watched Tom put his dog away and put something in the garage, but he couldn't be sure what. The house was quiet and dark except for a street light by the driveway. I walked over to the garage door and looked in the window. There, illuminated by the street lamp, I could see two medium size raccoon carcasses lying on the floor. Now we had more than enough probable cause for search warrants.

Early the next morning found wildlife officers knocking at both residences. Our search of Tom's place revealed 19 frozen raccoon hides in a spare freezer, plus the two in the garage. He also had an illegal beaver pelt in possession. Ski had only four illegal raccoons, but officers also found parts of two illegal deer, a goose, and 97 trout (27 of which were under the legal size limit). It took several months for those cases to work their way through the legal system on various appeals. But, in the end, Tom and Ski paid some hefty fines and lost their hunting privileges for several years.

During those years of high fur prices the action didn't come only before the opening of raccoon season. A lot of hoof-ties were after easy bucks back then, and roadhunting for raccoons became as popular as it is illegal. It was always easy to distinguish those roadhunting for raccoons from the recreational spotlighters. The roadhunters shined their spotlights only in trees, along corn fields, ditches, and along streams. Most of them were careful to keep their lights off of the fields, so they wouldn't get caught shining on a deer with a gun in the car. We did catch a few that way sometimes. But one particular case stands out in my mind, which sort of exemplifies the mania for fur during those years.

I was patrolling near Roaring Branch when I observed a pickup performing the classic tree illumination activity of a roadhunter. Unobserved, I followed the truck for over 35 minutes, watching the occupants shine everywhere one would

## KILLING EAGLES IS UNLAWFUL!

Mature Bald Eagle



Immature Bald Eagle



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leading to the CONVICTION of individuals who MOLEST,  
INJURE, or KILL BALD or GOLDEN EAGLES.

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reasonably expect to see a raccoon, while carefully avoiding deer grazing areas. Feeling confident they had a firearm in the truck, and with a good understanding of roadhunting practices, I decided I had a case. I pulled them over. To my amazement, however, they had no firearms. But in the back of the truck was a ten-foot long noose, which they admitted was for pulling raccoons out of trees, and three clubs for killing them.

Deputy Jim Farr and I encountered a similar case near Lawrenceville one night when we stopped another spotlighter after he shined some deer. Again thinking he probably had a gun, we found only a bloody ball bat that the driver admitted he used on any furbearer he could find. He paid the penalty for roadhunting.

Since fur prices have dropped, such violations aren't quite as common. But just last winter a local farmer apprehended a couple of fellows who were roadhunting for foxes near Yarnell, Centre County. It was 3 a.m. and they were driving in the farmer's field, spotlighting, with a gun in their truck. Foxes or deer? I accepted their fox hunting story—the fox hunting season had closed the day before. Moral? Violating doesn't pay! See you next month as we go after turkey hunters who like to hunt out of blinds and over bait.

# Thornapples



Chuck Fergus

I HAD ALWAYS been mildly curious as to why Axemann, a hamlet in Centre County, was so named. An axe murderer had committed gruesome deeds there? A renowned woodchopper called the village home? Browsing in the library one day, I came upon a book, *Pennsylvania Place Names*, by A. Howry Espenshade, which gave an explanation.

William Mann, Jr., and Harvey Mann, of New York State, migrated to central Pennsylvania in 1828 and set up the Mann Axe Factory two miles southeast of Bellefonte. It was a propitious location; at that time, more iron was being produced in Centre and Huntingdon counties than anywhere else in the nation. Smelted in charcoal furnaces, the

iron was free of impurities and well suited to the manufacture of steel for edged tools. The Manns prospered, opening additional factories in Mill Hall, Tyrone, and Yeagerstown. Although no longer made, Mann axes have (says Espenshade) “sung their own praises in every wilderness of America.”

So the name, Axemann, commemorates enterprise and industry rather than a psychopath or a tree-feller. (I am still left wondering why the words are reversed. Why not “Mannaxe?”)

Bellefonte: it is French for “beautiful fountain,” and describes the large spring that supplies the town with abundant pure water. The name is said to have been suggested by Charles Maurice, Duke of Talleyrand, a political exile who visited there in the late 1700s.

Names. Pennsylvania has a passel of them. According to an article I read in the *Pittsburgh Press*, the commonwealth boasts 5215 named populated places, which is 2000 more than runner-up New York. Texas and California combined have fewer places on the map than Pennsylvania. And on top of the 5215, Pennsylvania has another 1549 townships and 3217 “rural non-populated” listings, for a total of 9981, each with a name of its own. (Well, not quite. Duplication, as you might expect, is rampant. Seventy-eight names include “Spring,” 59 “Pine,” 57 “Pleasant,” 50 “Oak,” 49 “Penn,” 32 “Franklin,” 32 “Washington,” and 30 “Jackson.” “When in doubt,” the *Press* article observes, “our forefathers . . . just named the place after Ben Franklin, William Penn, Andrew Jackson, or the nearest tree.”)

I once met a German who asked where I was from. Central Pennsylvania, I said. The nearest city? Altoona. The German smiled. Turns out there’s an “Altona” near his home town of Hamburg. Turns out that *our* Altoona swiped its name from the Teutonic city (both are railroad and manufacturing centers), which, my German friend told me, was grumblingly judged as having been sited “Al to na,” or “all too near,” the town walls of old Hamburg. (Sounds like the “not in my back yard” syndrome was



AXEMANN



alive and well in medieval Germany.)

Many Pennsylvania towns and cities have appropriated their names from far-away places: Bangor (named for a Welsh seaport), Berwick (Berwick-on-Tweed, England), Bethlehem (the town in Palestine where Christ was born), Charleroi (a Belgian city noted for glass-making), Dublin, Hanover, Jericho, Mexico, Paris, Peru, Cuba Mills, Yukon, Berlin — nor let us forget Tyrone, named after County Tyrone, Ireland. (When I was a boy, I remember having to hold my nose whenever we drove through Tyrone, because of the paper mill's stench. Mom had me convinced that the horrid smell was why all the people of Tyrone had scrunched-up noses. They didn't, really.)

Baffling names. Funny, baffling, weird names, most of which, unfortunately, go unexplained in the book by A. Howry Espenshade (also rather a weird name). Scalp Level. Korn Krest. Twenty Row. Turnip Hole. Flat Rock (two, one in Centre and one in Fayette County). Gum Stump. Straw Pump. Bastress (population 30). Shy Beaver. Ribot (pronounced REE-bo). Ryot. Cypher. Coupon. Cracker Jack. Whiskerville.

Some names indicate hardship and want: Dearth, Drab, Grimville, Hungry Hollow, Needmore, Mount Misery, Panic, Rough and Ready.



SHY BEAVER

Others speak of more salubrious times: Smokeless, Live Easy, Lovejoy, Model Village, Nicetown, Goodhope, Goodville, Good Intent, and of course all those Pleasants.

Many names are wildlife-inspired. We have a Turkey City, a Turkey Run, a Turkeytown, and a Turkeyfoot. An Elk County, four Elk townships, an Elk City, two Elk Dales, an Elk Creek, an Elk Lick, and an Elkview. There's a Wildcat



ELK VIEW

over in Clarion County; Hawk Run, Buffalo Run, Wolf Run, Panther, Porkey, Pigeon, Bear Rocks, Deer Creek, Buckhorn, Otter Township, Raccoon Township, even a Cammal. (Either they spelled it wrong or I don't get the joke.) I can't find a single place named "grouse," but there is a Woodcock Township in Crawford County.

Paging through my *Pennsylvania Atlas and Gazetteer* (a functional book published by the DeLorme Mapping Company, P.O. Box 298, Freeport, ME 04032, with contour lines, township roads, creeks, swamps, State Forest and Game Lands, boat launching sites — all kinds of things to interest serious outdoor types), I came upon a most intriguing set of names in the forested mountains south of Warren. Not five miles apart lie the villages of Minister, Sheriff, and Lynch; two miles south, across the ridge, is Deadman Corner. Bet there's a terrific story tied up in those four monikers.

Indian names are plentiful. The most mellifluous, for my money, is "Susque-

hanna,” the name of a river, county, township, and numerous villages and towns. It means “the long reach river” in the Delaware language. “Tuscarora” slips off the tongue almost as easily: the Tuscarora tribe joined the Iroquois Confederation in 1713, forming the so-called Six Nations. Tuscarora means “hemp gatherers” and is attached to a creek, a mountain, a town, and a village.

Conodoguinet means “winding river”; Loyalsock denotes “middle creek”; Moshannon comes from Mooshanne, or “elk stream”; Youghio-gheny means “winding stream.” Kinzua is variously explained as “fish” and “they gobble”—presumably in reference to wild turkeys and not to hungry human denizens. Punxsutawney is named after a former Delaware village which occupied the site where the town now stands; the name means “gnat town,” and our word “punky” derives from the same root.



PUNXSUTAWNEY

Strife between Indians and whites is memorialized by Burnt Cabins, a village in Fulton County. I had always supposed the Indians burnt the cabins. But the story is more complicated. Settlers had squatted on these lands, west of the Susquehanna, in unpurchased Indian territory; in the mid-1700s the Iroquois demanded the squatters be removed, and Governor Hamilton sent troops to evict the white interlopers and burn their homes.

Before I die, I hope to visit Frogtown (not too unlikely, as it is only a dozen miles from my home), and also Dogtown, over in Columbia County. I'd like to travel in exotic Orient (Fayette County) and immerse myself in the wonders of Bagdad (Armstrong County). I can sojourn in Africa or see the splendors of Alexandria and Athens without leaving my home state. And I certainly wouldn't want to miss Yerkes.

From Ache to Zumbo, you've got a name in Pennsylvania.



SLIPPERY ROCK

At times white settlers simply translated Indian names before adopting them. Stony Creek was formerly Sinnehanna.” The town of Slippery Rock lies near Slippery Rock Creek, which is wide, deep, and studded with large rocks on which one can cross the water. The rocks, it is said, are often slimy and slippery with algae.





**WITHOUT** camouflage, scents, stabilizers, etc., this hunter scored in the 1960s with a bare semi-recurve bow and wooden arrows. Equipment has certainly changed since then, but the essence of the sport has remained essentially the same.

**How to become . . .**

## **A Big Game Bow Hunter**

**By Keith C. Schuyler**

**"I'D LIKE TO** get into bow hunting, but frankly, I'm reluctant to shoot against those hotshots at the club."

How often do you hear such a statement, or something similar, by someone who would like to hunt big game with the bow?

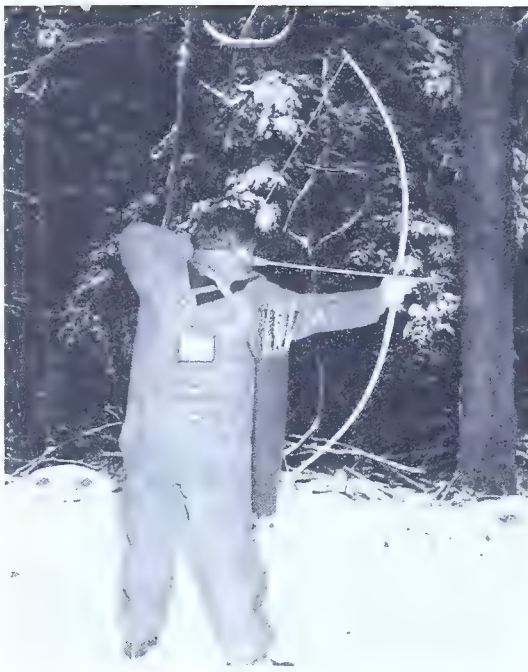
It isn't lack of wanting to shoot with the big boys. Perhaps, it's confusion that results from reading too many magazines that tout the latest and fanciest in archery equipment and the heretofore unheard of arrow speeds. Photos of archers with their big game kills don't help improve the self esteem of the person who feels inadequate to try for a Pennsylvania whitetail.

Experience is the answer. But, for the tyro, the situation is something like the advertisements that offer jobs only to

those who have a few years of experience. How do you obtain experience when the pace seems too fast for a rank amateur? All those cables, special rests, overdraws, tree stands, scents, conflicting claims by manufacturers, etc., are enough to frighten even archers who just a few years ago felt somewhat secure in their knowledge about archery equipment.

### **Let's Back Up**

Well, let's back up those few years, even a few decades ago, and take another look. October of '59 found deer hunting coming into the ninth regular season for Pennsylvania bow hunters. That year 76,767 archery licenses were sold, resulting in a reported kill of 1409 deer, a success rate of 1.83 percent.



**WAYNE SCHUYLER**, Keith's brother and former president of the Pennsylvania Archery Association, takes some practice draws with a longbow before starting a hunt in the 1950s.

Last year, 263,566 archers reported taking 9866 deer, a success ratio of 3.74 percent. This is, perhaps, the highest success ratio reported here by bow hunters since 1951, when the first regular archery season was established. In the six-year stretch, 1957 through 1962, the average success ratio for archers was 2.05 percent. This means that, before the advent of the compound bow and the proliferation of gadgets to make the arrow go straighter and faster, 205 archers out of each 10,000 were taking a deer. Last year, 374 of each 10,000 archers reported taking a whitetail. The actual kill is believed to be substantially above that figure, because some archers do not report their deer. But for our purpose here, we will stay with reported figures.

There were those who thought the introduction of the compound bow in the early 1970s would make hunting so easy that bow hunting would be outlawed. And that was before cams and other contraptions based on the same compound bow principle came into being. All it has meant, from the standpoint of success, is that 169 more archers in each 10,000 are getting their deer today than in the "primitive" years noted. And, it is a fair bet that a large percentage of those who are successful

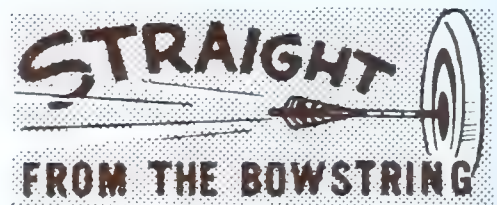
today are those who learned their lessons well 30 years ago and are continuing their winning ways.

Those of us who confess to having hunted with the bow, even before advent of the compound and previous popularity of the recurve, had to learn by trial and error. We had little to guide us except desire and our previous experiences in gun hunting.

What it really boils down to is that no amount of gadgetry will fully compensate for lack of woodsmanship—despite the trend to tree stands, attractor scents, elimination of body odors, and camouflage so effective that you almost need a name tag to find yourself.

I am by no means discounting the efficacy of modern bow hunting equipment in the hands of a knowledgeable archer. It should be obvious, though, that the word *hunter* holds more clues to success than any other factor. Those who fought in Vietnam found their adversaries to be formidable opponents despite their frequent lack of modern firearms. Knowledge of terrain and ability to use whatever arms are available cannot be over estimated.

While it is true that most modern bow hunters were weaned on some variation of the compound bow, there are still plenty of old timers who scored on big game with the once standard longbows and recurves. In fact, a significant number of deer hunters are going back to the more primitive arms just to renew the greater challenge. They know that success is still more dependent upon ability to outwit the deer in their own habitat than being able to compete successfully on the target line. Many of





**BOWHUNTERS** today don't look at all like they did just a couple of decades ago, but the keys to success have remained unchanged. Modern equipment is no substitute for practice, learning your territory, and developing good field skills.

these are hunters who scored previously with the bent sticks and strings and know that they are effective in the hands of one who has trained well. Some have just dropped all the gadgets to shoot the bare compound bow.

So, for those of you who want to start hunting with the bow, but are bashful to expose limited ability in front of your peers, don't hold back. Rather, hone your woodsmanship ability with your shooting ability, until the two skills mesh at some point that will give you confidence. There is no necessary level of equipment which you should seek to acquire. Rather, you should shoot for a satisfactory level of competence in your chosen setup.

Modern equipment makes shooting the bow and arrow easier. The fact that success rates have risen considerably since the early days of bow hunting attests to improvements in equipment and, presumably, shooting skills—and the fact that there are more deer today. But it is still quite modest, considering that much hunting is now done from tree stands, a technique that reduces the need to develop woodsmanship ability.

Consider that almost all those in the early days of bow hunting had to match wits with the quarry on its terrain level, where the vagaries of wind and visibility have a more profound affect upon the game. Further, until bow sights became popular, and eventually caused division among target archers, shooting was basically instinctive. It limited the range at which the average archer could be effective, making it necessary to get close to the animal or risk a miss or a bad hit. A range of 20 yards, or less, became the universally accepted maximum. Of course, there were those who would shoot at any distance and brag about lucky hits or near misses.

Today there are bow hunters who can shoot effectively well beyond the 20-



yard rule of thumb distance. But most responsible hunters stick to the old rule. This is not so much for lack of ability to pinpoint shots at longer distances but for the very real possibility that an animal might move after the arrow is released. A well planned intention may result in a wounded animal at excessive ranges. It takes more than twice as long for an arrow from the same bow to reach out 40 yards than it does for the conventional 20.

Most of my personal successes have been attained at distances well within the suggested maximum range. Those who scored on hunts that I shared had similar experiences. Misses usually occur when arrows go high rather than low, a factor to consider when practicing.

True, faster bows and lighter arrows might extend the practical shooting distance for those so equipped and with the ability to utilize the advantages of a more sophisticated setup. But such combinations find greater utility in the

wide open spaces of the West, where cover is generally more sparse and frequent high altitudes provide less air resistance.

Consequently, if you want to be a big game bow hunter, put the accent on *hunter*, not bow. It is rare that a deer will "jump the string" on a 20 yard shot. If you can keep your arrows in a six-inch circle, from various shooting positions, at 20 yards, it is time to concentrate on how to get a shot within that distance.

As a minimum, scout your proposed

hunting territory to find a well hidden stand with an open shooting lane on either side of a couple good runways. Get a camouflage suit or plan to wear dark garments. Camouflage your bow, if it doesn't come that way, with a can of car primer, and add a few streaks of one or more colors.

Continue to practice shooting before, during and after the hunting season, and you'll become a big game hunter. And with a little luck, you might soon have the evidence to prove it.

## *Books in Brief...*

(Order from publisher, not from Game Commission)

**Records of North American Big Game**, 9th ed., 1988, edited by Wm. H. Nesbitt and Jack Reneau, Boone and Crockett Club, P.O. Box 547, Dumfries, VA 22026, 498 pp., \$51.95 delivered. This Centennial Edition of "the book" commemorates the first century of service to hunting and conservation by the Boone and Crockett Club. The club was founded by Theodore Roosevelt and a few friends and has been instrumental in many conservation efforts, but is best known for its measurement system and its record keeping. Almost 10,000 trophies in 34 categories are listed in this new edition, including nine new world's records and 54 new trophies in the top 10 of their categories. In addition to these listings and photos of the top trophies, there is a history of the B&C Club, a four-color section on the club's conservation stamp prints, stories behind the new world's records, and much more. This is a very impressive book, one that belongs in every trophy hunter's library.

**OutdoorLife Gun Data Book**, by F. Philip Rice, Stackpole Books, Cameron & Kelker Streets, Harrisburg, PA 17105, 412 pp., \$27.95. All kinds of information of interest to shooters—specifications on hundreds of firearms, cartridges, scopes, iron sights, whatever. An excellent reference.

**Tarrant Trains Gun Dogs**, by Bill Tarrant, Stackpole Books, Cameron & Kelker Streets, Harrisburg, PA 17105, 222 pp., \$16.95. This book is subtitled "Humane way to get top results," and that in itself should catch the attention of most dog people. Tarrant is the longtime dog columnist for "Field & Stream," so knows his subject from choked nose to tip of tail, which means his advice is well worth heeding.

**Ruffed Grouse, The Wildlife Series**, edited by Sally Atwater and Judith Schnell, Stackpole Books, Cameron & Kelker Sts., Harrisburg, PA 17105, 377 pp., \$52.95, delivered, (\$62.95 after December 31) plus 6 percent sales tax to state residents. The editors did an excellent job combining the expertise of today's foremost ruffed grouse biologists and writers with the talents of some fine photographers and artists to create this outstanding life history account of our state bird. Gordon Gullion, David Samuel, Gerald Storm, Gary Turbak and 23 others, each writing in his own area of expertise, cover the ruffed grouse from its place in history and the environment, through its physical attributes and way of life, to its habitat needs and the management practices currently employed to ensure its future. Complementing their accounts are more than 300 full color photographs, 80 illustrations, 40 tables and maps, 50 charts and graphs, and more than 400 references. This authoritative and attractive volume, endorsed by the Ruffed Grouse Society, will appeal to resource specialists, sportsmen and everybody else interested in the grandest of game birds. Brook trout will be the next species featured in Stackpole's "Wildlife Series," scheduled for publication in the fall of 1991.





**SHOTGUN or rifle for fall turkey hunting? Either can be used successfully, but the shotgun has reigned supreme for many years as thousands feel calling a bird into scattergun range is the paramount goal.**

# Fall Turkey Guns

**By Don Lewis**

**Photos by Helen Lewis**

**S**PRINGTIME gobbler hunting in Pennsylvania means shotguns only. The hunter must be close enough to recognize a tom turkey and to see its beard. This means short range shooting. However, during the fall season, when both sexes of turkeys are legal, either a shotgun or rifle may be used, and this is where the arguments about the best type of turkey gun begins.

Is a shotgun better than a rifle? Hah, suggesting this to a group of turkey hunters will produce two factions of extremists quicker than a toad can zap a bug off a wall. Mild mannered gentlemen will suddenly become defiant to the point of being obnoxious. Allow me to cite an example.

A professional man who is capable of doing highly meticulous work got

so wound up about the "miserable BB-totin' clowns who have the unmitigated gall to carry a shotgun in the turkey woods . . ." that he actually forgot what he was doing.

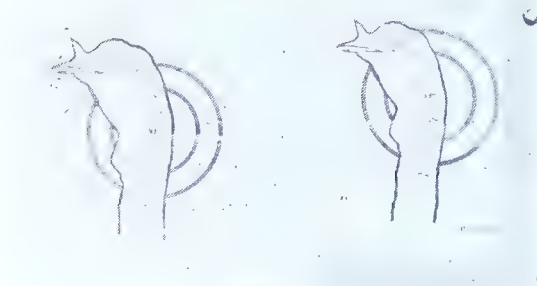
## Another Instance

In another instance, a machinist angrily told me about watching "a half-baked idiot with an inch-thick varmint barrel welded to a military relic topped off with a four-foot scope firing at a turkey over 150 yards . . ." And so it goes, each side doing all in its power to discredit the other.

Maybe I will surprise both sides by saying that I think this is as it should be. Let the arguments continue. Let the evenings in the hunting camps, sportsmen's clubs and service stations ring out



**GORDON CRISSMAN, Kittanning, using a Winchester Model 1300 equipped with an extra full choke tube, patterns his turkey loads at various ranges to learn exactly what shot density and point of impact are.**



with hot debate. The wagers, arguments and accusations add up to a healthy situation.

Now, I'm not advocating acts of violence; these kinds of arguments are not dangerous. Sometimes tempers get a little hot, but rarely to the boiling point. Most end up with a "you don't know what you're talking about." All of which reminds me of an old-timer who for nearly 40 years had pressured his deer hunting friend to switch from a 270 Winchester to a 30-06. I asked if his friend wasn't successful with the 270. "Sure his is," he replied. "In fact, the old codger has shot several more deer than I have. But he just won't listen to reason." I never cracked a grin, but I was laughing inside.

For the reasons already expressed, I'm not going out on the proverbial limb and suggesting which type of gun is best for the turkey hunter. The checking I have done reveals rather strongly that the type of turkey gun used reflects pretty much the philosophy that the hunter has toward turkey hunting. Maybe this proves that the type of firearm used is secondary. The fact remains that either the rifle or shotgun can be

used successfully during the fall season. I think the hunter should stick with the type he or she feels will bring success. You'll note that I included both sexes, and for a good reason, too. A large segment of female hunters is matching wits with Pennsylvania's wary turkey. Many of these ladies are qualified turkey hunters. They are excellent shots and are right at home in the turkey woods.

The shotgun has reigned supreme for many years, as thousands of hunters feel that calling in a turkey is the paramount goal of a seasoned turkey hunter. This is the way tradition suggests that turkey hunting began in the early days of this nation, although I'm prone to think that lots of our forefathers used the rifle. Many muskets of colonial times were smoothbores, and could be fired with a single ball or a shot charge. Choke boring, which made a shotgun completely separate from the rifle, did not appear here until the late 1800s, though the English say they had it by 1866.

The shotgunner who depends entirely on calling to bring a turkey within shotgun range looks with disdain on the hunters who slip through the woods looking for distant, unsuspecting birds, and then cut loose with some type of scoped rifle. Right here, I have to step into the argument. Being a longtime varmint hunter, I can see the challenge in making a precise shot on a turkey that is well beyond shotgun range.

On the other hand, I have to step back across the line and join the shotgunners when the "saving meat" argument comes up, which it definitely will.







The old-time hunter shot turkey to eat, and he needed to bring the bird in close to put his shot charge into its neck and head. Hit that way, little or no meat was wasted. Even a body shot at 25 to 40 yards with a load of 4s or 5s won't destroy nearly as much meat as a 224 or 25-caliber bullet. Nor are reduced loads in varmint and hunting rifles a guarantee of saving meat. One hunter who shot a turkey at 125 steps with a 270 Winchester said the turkey literally wilted when the 130-grain slug struck, but the turkey lost three pounds in the process.

The shotgunner is quick to point out that his outfit is far more effective than a rifle. Invariably, he brings up a case when a bird hit high or low with a rifle bullet simply took off. Conversely, several converts to the rifle rolled their eyes piously when they recalled a number of birds they had literally de-feathered with a shotgun before they wised up to the rifle.

Today's shotgun turkey hunter has a wide selection of "special" shells to choose from. Consider Remington's 3-inch 12-gauge SP (special purpose) 2×6 multirange duplex shell with its 1<sup>7</sup>/<sub>8</sub>-ounce shotcharge. It is loaded with two different shot sizes. This duplex load consists of medium size shot (6s)

for dense uniform patterns at all normal ranges, plus larger shot (2s) which penetrates leaves and brush at close ranges, while delivering optimum energy and penetration at longer ranges.

Winchester has a 3-inch 12-gauge Double X Magnum Turkey Load. It carries a 2-ounce load of copper plated shot. There are others that I haven't tested, but I know these two creations will work to perfection for the shotgun turkey hunter. However, the special load brings up a point that many of today's hunters overlook. There is a feeling that shotgun hunters in the gaslight era used shotshells that were weak and unreliable. That's as false as a seven-dollar bill. Many black powder loads, and the very early smokeless powder loads, gave velocities similar to the ones you and I get with the modern shell. Let's step back to an ad in an 1892 issue of *The American Field*.

It says, "... the United States Cartridge Co. created a new paper shotshell (Climax) with a conical base and extra strong and quick primer, that is especially adapted for SS (smokeless) and all black powders. The fulminating powder in the primer is the result of months of experiments. When ignited, it instantly and thoroughly burns the full charge,



**THE WHITE-TAILED DEER** is the eighth species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for non-game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patches of the snowy egret, bluebird, bobcat, kestrel and elk are still available: those of the osprey and river otter are sold out. Decals (\$1 each) are available for all but the egret and deer. Order from the Game Commission, Department AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.

giving quick and even discharge, and more penetration to shot." By the 1930s, the marketplace had an impressive array of top quality shotshells, including Peters Rustless, Winchester's Repeater Speed Loads, Leader, and Ranger.

The Climax was still around with the Ajax Heavies, and there were other names such as Defiance, Romax, Western Xpert, Western Field. Two of my favorites back in the '30s were Peters Victor and Peters High Velocity. The old-time hunter was not shortchanged in the shotshell line.

### Basically

Basically, the shotgunner should be more concerned with the load that gives the best pattern. It's a cardinal rule that shotguns should be patterned on turkey-type targets prior to opening day. I might add that both Winchester and Hornady offer inexpensive shotgun patterning targets. The hunter must know where his shotgun puts its patterns in respect to where he thinks he is point-

ing. Failing to do this has cost more than one inexperienced turkey hunter a spring gobbler or fall turkey.

Federal's buffered load of number 4 shot is a good one to start with. Not all shotguns shoot to the same point of impact with different load combinations. Testing for this does require time and expense, but the end results are worth it.

Many springtime gobbler hunters think only in terms of distance. The idea that all gobblers will be taken beyond 50 yards, which is pretty much the maximum effective range of a 12-gauge 3-inch Magnum load on turkeys, defeats the purpose. Top callers tell me it is usually not difficult to bring a bird within 40 yards, even closer in some situations. The hunter should use a load that gives him maximum density at 50 yards.

I have allocated a good bit of space to the shotgun in this article as more turkey hunters use a shotgun than a rifle. On the other side of the ledger, the rifleman shouldn't be left out entirely. The rifle can be used successfully during the fall season.

While the rifle offers added range, it also is more destructive. Some hunters believe that reduced loads in a rifle eliminate meat damage. That's not quite the case. A 150-grain 308 bullet slowed down to a muzzle velocity of 2400 fps can still do a lot of damage at 150 yards, no matter what type of bullet is used.

Probably the perfect spot on a broadside turkey for the rifleman is where the wing joins the body. It's often referred to as the butt of wing. Placing a bullet in this area will certainly reduce meat damage.

It's wrong to assume the rifle turkey hunter always shoots beyond 100 yards. From what I have learned, few rifle hunters get shots that far away in the woods. Turkey terrain is usually thick, and a turkey is not a large target. The rifleman should not blast away at distant turkeys where bullet placement is difficult.

A word of caution about concocting reduced loads. It's not just lowering the



**RUSS WHITTAKER, Cowansville, used a Remington Model 11-87 to take this fine fall gobbler. Whether using a rifle or shotgun, the important aspect is to know what your hunting arm will and will not do.**

weight of the powder charge; it's getting a smaller amount of powder to work safely and efficiently with the primer and bullet being used. No handloader should work up a reduced load in any rifle case without first getting competent advice. I have been reloading for decades, but when I crank out a batch of low velocity rounds I use published information that has been range tested. I just don't reduce the powder weight and start charging cases. Reduced loading is far more complex than that. Work with an experienced reloader who is familiar with reduced loads.

### Two Guns in One

The combination rifle/shotgun is a boon to the fall turkey hunter. Two guns in one, so to speak. Here again, the shotgun barrel should be patterned with different loads and at several distances. Perhaps the biggest question with such an outfit is whether to mount a scope or stick with iron sights. A scope is harder for the average shooter to use on wing shots, but it will give a clear sight picture and precise aiming point when the rifle barrel is used. Several "quick-point" sights on the market allow the hunter to see his target on wing shots. The size of the red dot at 100 yards pretty much covers a turkey for the rifleman.

I'm prone to stick with low power scopes for combo outfits. One example is the Simmons 1-4X, which has a 52-foot field at 100 yards at bottom power. If you use a Remington 870, 1100 or 11-87, B-Square, Kwik Mount and



others have mounts with which a scope can be installed in minutes. Eye relief with the 1½X Simmons shotgun scope, for instance, is a full five inches, and field of view is close to 50 feet at 100 yards. This might sound on the low side powerwise, but 1½X is plenty in the turkey woods.

The type of firearm any turkey hunter uses for hunting in the fall season is up to him, so long as it's legal. But if yours is a shotgun, pattern it with the loads you'll be hunting with, to make certain you're getting enough density and that their location is near your point of aim. If you use a rifle, zero it carefully so that you can place a bullet with precision. Once that is done, and the target is identified as legal game, chances are the tail mount that decorates the wall next winter will testify that you and your turkey gun are a perfect team.

## Thoughts While Walking

*You cannot possibly have a broader basis for any government than that which includes all the people, with all their rights in their hands, and with an equal power to maintain their rights.*

— William Lloyd Garrison

# *In the wind*

bob mitchell



Testifying before the U.S. Congress about improving responses to major oil spills, the Chesapeake Bay Foundation made the following recommendations: that oil drilling and production facilities be prohibited in sensitive estuarine areas; a national energy policy be developed to reduce the nation's dependence on oil; energy conservation policies be encouraged with financial incentives; that the transport of petroleum through coastal and estuarine areas be reduced as much as possible; double hulls and back-up steering systems be required on all tankers; and that the coastal tug and barge industry be regulated more stringently.

**A \$4500 reward was paid last March to a person who supplied information that led to the arrest of a British Columbia man for killing a grizzly bear in Idaho. The reward was sponsored by the National Audubon Society and the National Fish and Wildlife Foundation.**

In an effort to assess the effects of predation on nesting waterfowl, biologists with the Iowa Department of Natural Resources have been monitoring waterfowl nesting success in an area protected from predators by a 9-wire electric fence and in an unprotected area. Last year, 12 ducklings per acre were hatched inside the enclosure while less than one duckling per acre was produced outside. Predation on waterfowl nests, particularly by skunks and raccoons, is becoming increasingly significant as suitable nesting habitat diminishes.

Most new televisions consume 1.5 to 8 watts of power when they're turned "off." According to the Rocky Mountain Institute, as reported in the "Iowa Conservationist," this power is used to run remote control and instant on features. This is the equivalent of a 1000 megawatt power plant, or 1/750th of the nation's capacity. The Institute recommends that televisions be manufactured so owners have the option of turning their sets completely "off."

**Of the 28,056 whitetails taken in Maine last year, 17,139 were adult bucks. Of those, 35 percent were 1½ years old, and 25 percent were 4½ years old or older, which the state Department of Inland Fisheries and Wildlife considers trophy animals.**

Two species of toxic blue-green algae are thought to be responsible for the deaths of more than 70 great blue herons at a Minnesota lake. While algal blooms are common, it's thought that a rare set of circumstances caused the algae to produce toxins in this particular instance. Egrets, cormorants, waterfowl and fish seemed unaffected by the toxin.

The Richard King Mellon Foundation recently gave a \$225,000 grant to the Isaac Walton League's Hunter Ethics' program. The three-year grant, which is the largest single grant ever received by the League, will provide core support for the League's efforts to promote responsible outdoor behavior and improved hunter-landowner relations.

The nation's corps of volunteer hunter education instructors recently received an "Outstanding Contribution Award," given through the "Take Pride In America" program. As reported by the Wildlife Management Institute, every state offers hunter education programs, and about 700,000 people are taught every year. Nationwide there are approximately 50,000 volunteer hunter education instructors.

ANSWERS:

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## **Voluntary Waterfowl Stamp No. 7**

Pennsylvania's 1989 waterfowl management stamp, a pair of hooded mergansers by Orange, Virginia, artist Ronald Louque is the seventh "duck" stamp offered by the Game Commission. Funds derived from stamp and print sales are used for wetland acquisition, habitat development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. For a savings, the cost for five or more ten-stamp sheets, in any combination of years, is \$40 per sheet. The 1987 stamps will be available through December 31, 1989, at which time all remaining supplies will be destroyed.

Stamps are available at the Game Commission Harrisburg headquarters, region offices, Pymatuning and Middle Creek Wildlife Management areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints of this design are available from art dealers and galleries nationwide.



# PENNSYLVANIA GAME NEWS

NOVEMBER 1989

ONE DOLLAR



*G. Lavanish*





## Outdoor Recreation Maps

To help outdoorsmen discover more of what Pennsylvania has to offer, the Game Commission has produced six "Outdoor Recreation Maps." Each multi-color 24 x 36-inch map covers one of the Commission's field regions. Highlighted are Game Lands, State Forests and Parks, and private lands enrolled in the Commission's public access programs. Also depicted are municipalities, roads, waterways, and — giving the map a three-dimensional appearance — 100-foot contour lines. Maps are printed on Tyvek, a tear-resistant, water-repellent material which will withstand years of hard use. Each regional map costs \$4 delivered, and can be ordered from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. If you are not sure of which maps you want, write for a PGC map order form.



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## It's No Accident

PENNSYLVANIA'S bear population is better than ever. We're maintaining a population of about 7500 bruins, and in recent years annual bear harvests have been running at record levels, averaging around 1500.

This outstanding success has not come about by accident. Black bear management has a long history in Pennsylvania. It was in 1905, when the Game Commission was almost ten years old, that Pennsylvania became one of the first states to protect black bears. A season was established that year which allowed bear hunting only from October 1 to March 1. The use of steel traps for taking bears was outlawed in 1911, and pens and pitfall traps became illegal in 1915. More importantly, black bears were starting to be considered game animals at that time, not vermin. In 1935 the use of dogs to chase and hunt bears became illegal.

Bear harvests remained fairly constant over the decades, probably reflecting increasing numbers of hunters in concert with shorter seasons. Annual harvests from the 1920s through the '60s hovered around 400 animals. The record during that time occurred in 1924 when 929 bruins were taken.

In the 1970s, interest in black bears started to grow, and it became apparent that much needed to be learned about our black bears if we were to adequately manage them in the years ahead.

The number of hunters seems to have always fluctuated widely over the years, but when the number seemed to jump from about 95,000 in 1973 to more than 200,000 just three years later, the need for a better understanding of the number of bear hunters became obvious. Also in the early '70s, the agency stepped up our bear research program and began to obtain a wealth of biological information.

But as is true in all fields of research, the more we learned about black bears, the more we found out we didn't know, and it took about ten years of research to bring the many aspects together and into focus.

The bear season was closed in 1970 and again in 1977 and 1978, and except for 1972, when the season was two days, only a one-day season we offered each year. Harvests in those years averaged 448.

The decade of the '80s brought signs that our years of bear research were starting to pay big dividends. In 1980, after much debate and controversy, protection was removed from bears less than one year of age. Our research had demonstrated that harvesting cubs does not jeopardize the resource, and it also demonstrated how unreasonable it is to hold hunters accountable for distinguishing cubs from older bears in the wild. It simply can't be done.

The following year, 1981, was the first in which hunters were required to purchase a bear licence. For the first time, we knew exactly how many hunters were out gunning for bears.

In recent years bear harvests have been higher than ever, and bears are now being found in many areas, particularly in the west and southwest, where they hadn't been seen in a hundred years or more.

Pennsylvania's bear population is in excellent shape, and hunting opportunities have never been better. But it's going to take continued work and vigilance to keep these trends going. Habitat loss, hunter access and a changing society are growing issues that must be addressed in the years ahead.

This bear season promises to be among the best ever. It didn't happen by accident. — *Bob Mitchell*





I RECENTLY thought of combining my two favorite sports, cross-country skiing and squirrel hunting. At first the awkward feel of the skis made me think that this idea was destined for the scrap heap, but I soon got the hang of it.

## Being Different Works

By Marion Younkin

I'VE ALWAYS been an avid hunter, and the gray squirrel has been my favorite quarry since I was young. Many people don't realize how close Pennsylvania came to loosing this popular game animal. In 1749, mast production failed and the mass migration of the little rodents prompted the governing body of the time to impose a bounty on them—three pence a head. Some 640,000 nut-crackers were turned in in just one year!

It's no wonder I respect this little animal so much, and maybe it is why I sometimes go to great lengths to bag one. Slinging a 22 rifle topped with a six-power scope, and tightening the laces of my well-worn hiking boots are about all the preparation necessary for an early October hunt. The days of the early hunting season are long and warm, making a long trek in Pennsylvania's rolling hills something close to a religious experience. Add the natural splendor of fall reds, yellows, and browns; the pros-

pect of a tasty meal; and you have a real hunter's paradise. Squirrel Utopia.

Over 20 years of hunting the elusive bushytail has given me my share of memorable experiences and has led me to try some strange tactics. The fall of 1981 caught me with my squirrel rifle in the shop for trigger repairs and the opening day starting the next day. Unwilling to let a forecast of 60-degree sunny skies pass by, I decided to take my Ruger 22 single action revolver. Despite some experience on local handgun teams, I felt my chances of scoring in the woods were slim. Nevertheless, I strolled into the hardwood forests determined to have fun. Spotting the first bushytail at a range that would have been easy for my rifle, I realized that handgunning meant getting closer . . . a lot closer.

Putting a large maple between me and my quarry, I began what was supposed to be a cautious approach. But

when I hitched my eye around the trunk, the squirrel was nowhere to be seen. Remaining motionless, I scanned the nearby trees for any sign of the vanished nutcracker. Nothing was visible, so I decided to try a trick I'd read about. I tossed a small stone to the other side of the tree where I'd last seen the squirrel, hoping to deceive him into thinking I was where I wasn't. It worked! A gray shadow flopped head down around the trunk and froze, trying to spot the source of the noise. I slowly lined the sights on the base of his neck and was soon admiring a fine, plump gray as a gentle October breeze wafted away the sound of the shot.

concerning nutcrackers, I have tried almost everything I've read or heard about. While reading an article on camouflage clothing by Keith C. Schuyler, I overheard an unidentified radio D.J. telling hunters, "if you want to get a squirrel, climb a tree and act like a nut". Why not? My next foray into the habitat of the wily gray squirrel had me garbed head to toe in camouflage and toting a portable tree stand. Acting like a nut was easy, as any bushytail who saw me struggling up a trunk of an oak, to stop panting and sweating about 15 feet off the ground, can attest. The elevated platform, however, increased my visibility and gave me a better angle of fire for



**DESPITE** some experience on local handgun teams, I felt my chances of scoring in the squirrel woods with my Ruger Single-Six were slim. Nevertheless, I was determined to have fun.

I was feeling pretty good about my success and was thinking that this idea of using a handgun for squirrel was a good one, that is until I missed my next three chances, the last opportunity from an embarrassing distance of 30 feet. Thinking over my stalking techniques, I realized that in the new fallen leaves, I sounded like an elephant dancing in a bag of potato chips. I began to place more emphasis on the stalk with enough silence to ensure a stationary target. This small adjustment helped me get within range and bag two more bushytails, with another miss sandwiched in between. Three plump bushytails in the bag, with four misses for the day, hooked me on handgunning for squirrel. Now I always take one day out of every year for this type of hunting.

During 20 years of manic behavior

treetop nutcrackers. The main disadvantage was the fact that looking up into the trees from such a small platform can be a big pain in the neck, but hunting bushytails is often a pain in the neck. By the way, camouflage clothing didn't seem to make any impression on the nutcrackers.

Have you ever noticed how difficult it is to locate a barking squirrel? It seems that when a bushytail spots you he instantly becomes invisible and begins driving you bananas by incessantly barking his fool head off. Of course you won't be able to see that bashful bushytail, that is until you give up and start off again. Invariably, all you'll see is a gray flash spinning around a limb, to vanish into a nearby knothole, while you stand there quietly cursing your lack of patience. The trick in this situation is to get the squirrel to move before you do and hope you get another crack before he escapes.



On one morning outing I heard a gray sound off in the distance and decided to see if I could find him. Using all my stalking skill, I worked up the slope in his general direction. I tried to keep cover between me and the noisy nutcracker, and 15 or 20 minutes later I figured I was close enough. Settling in I began quartering the area for my quarry. As the time passed I began to fidget and play with the coins in my pocket. Suddenly it occurred to me to try barking back at the gray noisemaker. Rasping the coin against the buttplate of my rifle produced a convincing bark, and the curious bushytail poked his nose over an oak limb about 20 yards away. I was so surprised that my idea actually worked that—of course—I blew the shot. Now I carry a Zippo lighter to use for “barking” squirrels. I don’t know why the Zippo works so well, but on a single afternoon I bagged four fine grays using this tactic.

On a lazy afternoon one November, I was watching a spider spin its web on low bushes next to the tree I was using for a pillow. On impulse, I picked up a stick and tried to get the spider to climb on. The stick made a faint scraping sound, and out of the corner of my eye I saw a flash of gray and was surprised to hear a bark. Rotating my rifle and head, I came to rest with the crosshairs on a plump bushytail.

Grays are pretty territorial and I think the twig imitates the sound of claws on bark, deceiving the squirrel into thinking another has invaded his territory. The rest is simple, when the gray comes to investigate, you pop him.

In Pennsylvania, small game season is split into two seasons. The first season runs from the middle of October until deer season, while the second season comes in after Christmas and continues through January. During the late period snow can be belt deep, and sitting for long periods of time waiting for nutcrackers can be very uncomfortable. However, I recently thought of combining my two favorite winter sports, cross-

country skiing and squirrel hunting. At first the awkward feel of the skis made me think that this idea was destined for the scrap heap, but I soon got the hang of it. Gliding down gentle rolling slopes to set up a shot on a gray working acorns in the top of an old oak, or pushing along an old logging road in search of a shy fox squirrel is totally enjoyable.

The buoyancy of the skis keep me from the exhausting work of plowing through the snowdrifts, and by looping the pole straps over my wrists, I free my hands for shooting without having to drop my ski poles. A white coverall outfit helped a great deal. While traditional camouflage clothing of greens and browns didn’t seem to impress the nutcrackers in the fall season, the white outfit, even topped with a blaze orange hat, worked so well that I wear it all winter now.

Last winter I bagged three nice grays simply by skiing up to a tree and waiting. The squirrels that vanished when I came along would poke their heads over limbs or around tree trunks a few minutes later.

For some reason the squirrels were unable to pick up a stationary hunter, even in the open, but spotted me in motion immediately. Since then, I’ve had squirrels dash for cover upon spying me skiing into their area, but when I stopped they seemed to quickly decide I was nowhere around and returned to feed in the open. I’ve also noticed that most animals, including squirrel, are less wary in January than in the fall. Perhaps less people tramping the forests is the major reason, but a forestry student at Penn State University tells me that the short days of winter may have something to do with this behavior.

In short, if you are adventuresome and just a little unconventional, you can find new ways to make your sport more enjoyable. Coming up with new ideas can pay off in the field, as well as make your hunting buddies wonder what you’ll come up with next.





# The Last Three Days

By Nick Sisley

QUILL, MY LITTLE eight-month-old English setter, was finally standing rigid, though I have to admit she was trembling a bit. No wonder. Moments before I'd been screaming "Whoa," at her. Not once but often. She knew my dander was up. Still wet behind the ears as far as the cunning ways of ruffed grouse were concerned, Quill had bumped one bird. Upon seeing it flush, she raced off in pursuit. That's when my first loud, whoa, echoed through the cut-over valley we were hunting. She hadn't run far when ruff number two swung into the air. Needless to say, my next "Whoa," was more vociferous, and more of them followed when Quill changed courses to dash after the second. But the action wasn't over, for grouse number three went airborne, followed by more yelling more chasing. Then, when my temper was ready to boil over completely, out went yet a fourth ruffed one. And Quill gave it a half-hearted chase, too.

I was taking a breather, hoping my beating heart would slow back down to normal, and at the same time keeping Quill stationary in front of me, hoping she'd get a clearer message of what the word "Whoa," meant. I shook my head, lamenting the fact that four grouse chances had escaped me, escaped after I had put in a gruelling three and a half hours traipsing over thick, tough and steep territory. Just as I was feeling extra sorry about my plight, I heard a grouse clucking. At first I thought it was another bird on the ground, getting ready to take off. But then I saw it was a ruff overhead, maybe a grouse that had just flushed and was already flying back to its "home site." I know, I've never known grouse to do that either. The shotgun in my hands went into action.

But I'm getting ahead of myself. Be-

fore covering the specifics of how three great grouse days ended, let me tell you about how they started. It was on Thanksgiving Day, 1988, in western Pennsylvania, the weather beautiful, scenting conditions near perfect. I wasn't able to get into the woods until about 10 o'clock. Thanksgiving dinner was scheduled for 4:30 p.m. It always takes a little arm twisting to get my wife to lay out the Thanksgiving splash that late, but it has been my experience that the grouse-getting in my bailiwick can be as good as it gets during that week of the fall.

## Pointing Dogs

I have three pointing dogs. Quill has already been described. Torrie is another female English setter, but 15 months older than Quill. King was born July 1, 1981, so he's had plenty of seasoning behind him. He was also the dog I used almost exclusively those last three days in question. Torrie's front legs were sore and bleeding from contact with a dog bell. Those wrists of hers were so irritated she would bump them raw again, wearing even a rounded electronic beeper and/or my electronic training collar.

King, though a lousy grouse dog until the 1987 season, had been getting better and better at this tough task. After the last three days of the season in 1988 I was ready to bestow a grouse-dog Doctorate on him. But he started off that Thanksgiving day with a bump. I didn't better the worsening situation, maybe because I was yelling "Whoa," when I should have been concentrating on getting the bird in the right place over the barrel. For those last three days I had blood in my eye—figuratively, anyway. Instead of carrying a small gauge smoothbore, I meant business. That

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meant my Franchi 12-gauge autoloader, with the most open choke I could screw into the end of its 24-inch barrel. The medicine I fed it was a 3¼ dram, 1½ ounces of hard 8s.

Lightness, quickness, readiness, all built into this special shotgun, all went for naught on that first flush; the barrels never caught up to the bird. One shot and the ruff disappeared behind foliage. After scolding King and myself both, we started after that one. I never saw. He never smelled. We didn't conquer.

### **A Fine Day**

But it was going to be a fine day, grouse in the bag or not. It hadn't been a good grouse year for me, at least in Pennsylvania. In October I'd spent 16 days in Michigan's Upper Peninsula, chasing grouse and woodcock. The hunting was exceptional for the latter, good for the former. November found me gone from home almost half the time, but the travel didn't discourage me that much because I hadn't found many ruffs when I was hunting Pennsylvania anyway. Now, with a good weather day and what I knew had developed into an outstanding grouse dog, I simply made up my mind to enjoy the coming hours. Too many times too many of us concentrate too hard on success, too little on the more important aspects of what we're doing.

I didn't say another word to King after that first flush, except to encourage him occasionally. Within 20 minutes he put on the brakes just as a grouse thundered out ahead of him. With soothing tones I walked up, telling him he was a good dog and all. Though I hadn't seen a feather, I gauged the possibilities and decided the ruff must have flown straight up the hill—to our left. That hillside was strewn with recently cut

treetops from a year-old timbering operation, and they'd be tough to negotiate, plus the going promised to be extra steep. Was it worth it? Because I was only guesstimating the bird's flight path?

We started up. Sometimes it was one step up and two or three back, and every step, forward or backward, was a struggle. I doubt the grouse flew 120 yards, but it seemed to take forever for me to reach the apex. The cover opened into an old field beyond the last downed treetop. Expecting a ruff to thunder out of there, I was ready. Though King didn't point it, he did get to fetch it. I decided that maybe there weren't as many gaping holes in that Franchi's pattern as I'd thought after the previous shot.

King made a good point after we eased our way back toward the creek bottom, but I was still 30 yards behind the dog when that bird decided to exercise its wings. I glimpsed it twice, at a great distance, so had a fair line to follow him up. Again, King located, pointing with a bit of a low tail, at a ground-hugging entanglement of grape vines. This time the bird held tighter, but he went out west when I approached the tangle from the east.

Two points later I was still without my second bird, but I was thanking my lucky stars to have been blessed with such good dog work. When King locked up yet again I began wondering why I hadn't enjoyed this kind of flush success all season long. With that the ruff went out, the little/big gun streaked into action and the 8s sent the grouse somersaulting. I couldn't believe it. In less than 90 minutes King and I were back at the truck. Quill didn't even get her chance to hunt that day, plus I was back at home well ahead of my deadline for the Thanksgiving Day gluttony.

I got up early the next morning and wrote the rough draft of a story, but by 11 o'clock I was in a favorite cover chasing ruffed grouse again. It was another perfect day, and I was determined not to kill myself with over exertion in this, another very steep, extremely thick covert.





**I WAS WALKING** along the remnants of an old logging tram, my path angling upward. King wasn't anxious to dive into too many briars as long as I was opting for the easy going myself.

Walking along the remnants of an old logging tram, my path angling upward, King wasn't anxious to dive into too many briars as long as I was opting for the easy going myself. Every now and then he'd weary of my lazy ways and dive into the upper or lower side of my pathway. On one of those occasions, a grouse erupted. King hadn't done anything wrong. He was 20 yards away from the bird. The grouse went nearly straight on up the hill, then right across in front of me. If an engineer ever drew the blueprint for an easy, open grouse shot, this was it. I missed cleanly—twice!

To add insult to ego injury, I caught a glimpse of a second bird just as I hit the trigger the second time. Had I killed with the first shot, it might have been a chance to make a double, and I've never made one of those on grouse. But both birds flew to the crest of where I was heading, and I had a perfect line. I was licking my figurative chops, when two more grouse went out of that same vine tangle where the original duo had made

haste. Two birds together, not only in the air at the same time, they took off together. A classic double. But I honestly didn't have even half a shot at one of them, despite losing one wild desperation try.

"Let's go King. After giving those two that flew to the top a chase, we can come back after the second pair." I spoke out loud, as if the dog understood what I was saying.

### **Took Wing**

But we never had to come back. At the very top of the high hill, King was working ahead of me when one of the wary grouse took wing. But he made the mistake of flying back where he had been, and I was in his path. It was a High Eight on the skeet field, and that grouse suddenly found himself right in the middle of the 12's pattern. We worked through the top and down the other side toward the west, then came back across the top, to the south of my original route across that top. Still convinced the second grouse would be up

there, I went back across one more time, on this occasion a little to the north.

King pointed cautiously, not with full vigor. Like the bird was close but not right “there.” I maneuvered on to another tram, then clucked several times, his message from me that it was okay to move forward with discretion. Two more times he established a point. There was a bird here. Had to be. But where? About then the ruff took off, angling up and away at 45 degrees—left to right. He crossed the tram in a blur. The sight picture looked perfect just as he was disappearing from sight so I hit the trigger.

### What A Day

What a day after Thanksgiving. Story written in the morning. Two great grouse kills in 25 minutes. For dessert I went home, got my golf clubs out of moth balls and played 14 holes before the sun went down.

The next day, Saturday, marked the tail end of Pennsylvania’s regular grouse season. As I went to bed that night I remembered previous seasons, espe-

cially the last three days of them, Thanksgiving, Friday and Saturday. One of those years my companions and I flushed 148 grouse those three days. Unreal. Those were heydays. There have been other such memories over the course of the last three decades—during this Thanksgiving period. As I turned King loose from the back of the pickup about ten o’clock Saturday morning, I not only knew it was going to be a good day, I knew I was going to kill a brace of ruffs as well.

It started off perfectly. Within minutes King was on point. Again I was taking the easy going on a log tram. King was actually pointing from that old road, his nostrils aimed down over the left side where vines, briars and multiflora were plentiful. About the time I got to the dog, the ruff took out, slightly below me, angling left to right and slanting up stiffly. It wasn’t a difficult shot. Another grouse had found itself in the center of the Franchi’s pattern. King pranced back proud of himself. My chest was bulging a little, too.

Maybe 15 minutes later we had reversed course, and we were coming back along the steep sides of this recently logged hollow. For whatever reason, King got too close to one. He wasn’t very far in front of me at the time, but I still didn’t get a good enough look for a shot. So I held off.

But I did get a long-range glimpse in the distance. Not once but twice. “We’ll get him next flush, old boy,” I chortled with the dog.

Since the late 1960s one of my goals has been to kill five grouse with five shots—in a row. I’ve killed four in a row numerous times. Guess I start thinking about five straight too much when I’ve killed four. That Saturday I started thinking about five straight when I had only three—the last two shots from Friday, the first shot of the day Saturday. I



**SECONDS LATER** I was encouraging Quill as she “worried” that dead grouse a bit, then lifted it in her young jaws and started running away. But she was only fooling. Soon she was running back toward me.



know I'm going to kill this next bird, I thought. That will make four in a row, and the season will be over (Pennsylvania's daily limit is two ruffs). I'll have to wait until the late season opens December 26 to see if I can get five straight. That'll mean an awful long time to think about it.

King went on point, and all I could think about was four and five straight. But that grouse never offered a shot. The dog work was impeccable. Thirty minutes later King pointed toward a deadfall below him on a steep slope. But no grouse went out. I got out ahead of the dog, finally standing on another old tram, before turning him loose. Still thinking four and five straight, I watched King cross the tram, tail slowly swishing, nostrils cautiously probing, head intelligently swinging from side to side. And out went our quarry. I should have shot. There was half a chance, and one doesn't often get more than that with The Ruffed One. No doubt wanting to keep my "straight" intact had me holding back. But then another bird went out. Shortly a third, and I busted a cap at that one, despite it being 40 yards (plus) away. So my four-straight possibility went out the window.

However, that first miss of the last day was only the start of a lot more shooting frustration. And one heck of a lot of flushes. On the follow-up King bumped another bird. I missed again. Then he pointed beautifully on what was no doubt a new grouse for us, and I missed—times two. We got to the end of the creek bottom, started back up through, but off to the side a tad. After crossing a wide opening and entering the thicket, I heard one go out. It was coming back, I saw, and around to my right. But a huge tree was in my way, maybe the only big tree the lumbermen hadn't cut when they timbered these acres. I had to back up several steps to get around it, and in doing that I half fell. There was a grouse, right in the open, and I couldn't even get the gun started yet. Much too late I was able to yank the Franchi's trigger twice. In vain.

Then there was another point by

King. Followed by my miss. Then another of both. My supply of shells in the coat was getting dangerously low. King was showing signs of not being able to cope all that well with my missing and the temperature the afternoon sun was putting on the slope. Angling back to the car, King pointed perfectly three more times. I missed on every one. Shortly after the last flush an unpointed grouse roared out well to my right, but flew straight to the front—where I was going anyway. An open field was farther to my right, so I knew this would be an easy one to reflush. I had only one shell left. Working that thick edge, I was ready. King didn't point, but he went through the area I figured that bird would be. Perhaps I let my guard down then. That's when the bird hit the air, anyway, wings awhir. I hit the trigger, missing by a scant ten feet.

It was time to head for the truck. Not only did my frazzled nerves need a rest, I'd fired my last shell, and King was ready for the box. I drank and drank



**THE WHITE-TAILED DEER** is the eighth species in the Game Commission's Working Together for Wildlife program. The program is intended to generate support for non-game animals. This year's white-tailed deer patch is priced at \$3, delivered. Patches of the snowy egret, bluebird, bobcat, kestrel and elk are still available: those of the osprey and river otter are sold out. Decals (\$1 each) are available for all but the egret and deer. Order from the Game Commission, Department AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.

from the water jug at the truck, replenished my shell supply from a fresh box on the front seat, then turned Quill loose for a final try on that final day. It was plenty hot by then, for bird hunting anyway.

It took a 15 minute walk to get back into cover I hadn't already traipsed previously. Next I made the mistake of hunting a different type of vegetation, a patch of 40 or more acres where red maple was coming back. It was thick, but there weren't enough grapes and vines, multiflora and briars, so the grouse didn't like it. After 20 minutes of scouring those young maples I decided to get out, urging Quill to angle back toward the more traditional stuff where I'd been enjoying so many flushes.

Right on the edge of where the red maple met the traditional cover, out went Mr. Ruff. No shot for me, but Quill in hot pursuit, me shortly screaming. And running to catch up and dole out some training discipline. That's when the departed grouse's brace mate decided to take off. Had I been paying attention it would not have been that tough a shot. Yes, I missed. But I had a

good line. Went right to it. Quill didn't foul it up. Missed again. I think there might have been another miss or two — until I got to the point where all this began — Quill quivering almost under my feet after I had screamed "Whoa" over and over, and that grouse returning to the scene of the flush was noted overhead.

About the time that grouse was ready to land in a tree, it discovered all wasn't right in its world. I was standing there, and so was that white, long-haired dog. Invaders. Darth Vaders. So the ruff shifted into second, then into third. But by then the Franchi's butt stock was nestling into my shoulder. My cheek was tight to the stock. The sight picture was nearing perfect. When it got there I hit the trigger. Seconds later I was encouraging Quill as she "worried" that dead grouse a bit, then lifted it in her young jaws and started running away. But she was only fooling. Soon she was running back toward me, although in a slightly circular path.

The last three days of grouse season had come to an end. What an end! What a beginning! What a middle!

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# A Dream Comes True

By George L. Harting

**I** WAS CONSIDERED incurable, born with a gun in my hands and a love of the outdoors in my heart. My real passion was waterfowling. As a youth I consumed all available literature on the subject, and patronizing art lined my bedroom walls. Long before legislation restricted the practice, I mimicked the waterfowler. Camouflaged in the garden berry tangles, I ambushed pesky English sparrows loitering there. It was a way of fulfilling the budding waterfowler's urge that surfaced during night visions.

Would a youthful dreamer be more content if future fates and fortunes were predetermined? It is hard to say. The outlook, however, for fulfilling my passion seemed bleak. The rustle of whistling wings, cattails, and morning haze over the duck blind seemed remote. My elders were quite insensitive to the drives that motivated the ways of a youthful sportsman.

During those times of stress I was totally illiterate to the nostalgia centering about the mighty Susquehanna. This major waterfowl flyway fashions the boundary of my natal county. Little did I dream, then, that my first years of professional employment would dictate residency on its very banks. As a resident, I was able to explore the legends in American folklore which accent the uniqueness of Pennsylvania's major river system.

Long before the white man came to our shores, American Indians from a variety of tribes traveled the river in canoes. Sometimes they were hunting or fishing, other times they were on war missions. In the lower river area, large



**FORTUNATE ARE** those among us who can reflect on happy realities. Reliving the waterfowl legends from the Susquehanna River flyway is one among my many.

basins have been gouged into the massive river rocks; folklore affirms it was here the indigenous natives ground their corn. The Indian Steps Museum, located on the York County shore, houses artifacts that clearly support the Indian presence here.

With the white man's coming to our continent's shores, the river bore the burden of their trade as primitive navigation emerged. Log rafts were floated south to be used for building material. Primitive canal systems made possible the transport of coal, flour, whiskey and wheat to Port Deposit. The river, free flowing in those days, allowed the annual migration of the white American shad to its spawning waters. En route, this anadromous species became a survival staple for early settlers.

Our river's Northern Branch rises in the vicinity of Elmira, New York, crosses our border into Bradford County, then



flows in a south-easterly direction. The West Branch has its origin in the center of our state. Innumerable Endless Mountain streams feed it as it flows east to intersect the North Branch at Northumberland. From its junction there, it meanders in a southerly direction, crossing into Maryland near Conowingo.

Over its course, the river flow cuts deep gorges through fortress mountain ridges, touches borders with major Pennsylvania cities, and adds a pastoral dimension to farmland. On its way to the Chesapeake Bay, it touches base with a varied topography; there are public places along its course for camps and access. It's a mile and a half wide at Washington Boro, Pennsylvania, and in its lower remote areas it has place for Mt. Johnson Island, which in 1958 was listed as the only bald eagle sanctuary in the United States.

What an attractant for waterfowl! The river's brushy banks and many islands encourage the nesting of mallards and teal. Its canal system, abandoned and wildly overgrown, becomes home for waterfowl families. Furthermore, a river so large and sprawling across most of eastern Pennsylvania becomes a migration corridor for many species. Legend indicates the popular flocks of yesterday's canvasbacks traveled overland from the north, intercepted the river at Liverpool then, following the waterway, headed for the Chesapeake Bay.

Ned Smith, who resided on the Susquehanna at Millersburg, tabulated the spring and fall migrations. In his diary, "Gone for the Day," his March 1966 notes are as follows:

"Water from the river has backed up

into the cornfield above Millersburg, flooding most of Cumming's Swamp as well. And the wild ducks are making the most of it. Twelve ring-necked ducks and six scaup were napping in the lower end. A striking bufflehead was diving energetically . . . To the casual observer the high and dry portion of the cornfield seemed devoid of ducks, but the spotting scope revealed hundreds of blacks, mallards, and pintails feeding beneath the screen of broken cornstalks and rank weeds."

For September of the same year Ned wrote:

"Yesterday I saw some sixty blue-winged teal on the river. They always begin their annual trip early and loaf luxuriously along the way. Any day now we can expect to hear the first clamoring wedge of Canada geese."

For how many ages, one is prone to ask, have these spring and fall migrations taken place along the Susquehanna.

Wherever waterfowl congregate, there will be the waterfowler. The Susquehanna flyway is no exception. Our earliest records are those of the market hunter and his exploits. "Why not?" was the attitude. After all, the supply of ducks seemed inexhaustible. Records clearly show the unregulated harvest extended over the entire lower Susquehanna. On the Chesapeake the employment of the swivel gun and sinkbox were common. The former weapon, mounted on the duck boat itself, loaded with unimaginable weights of lead and explosive charges of powder, could be directed to take, on one firing, an entire raft of ducks.

Batteries, or sink boxes, were common tools of the market hunter. These boat-like devices allowed hunters to hide below water level. When flocks would decoy, the participant was in position to make a fantastic kill. Canvas decks were attached to the device and surrounded the "blind." Decoys—some made of cast iron—were placed on the deck to serve as ballast and to attract flights.





**NELS, very proficient with the scull oar, makes an early morning run on the rigs, hoping to get shooting at any early flights that might have decoyed.**

Market hunting of a different style took place on the river as far north as Herndon. There it was big business. At Herndon participants entered the river and hunted south to Harrisburg or Columbia. A ready market was always available for a boat load of ducks, so hunters were greedy.

Round bottom boats were designed so they could be tilted to one side. This technique allowed the boat to double as a moving blind. Colloquially, the model is known as a Susquehanna Sneak Boat. The more proficient marksman did the shooting while a companion propelled the boat. Most market men carried two or three guns aboard so that no opportunity to bag game was neglected. Hunters had eight months to shoot, no limits were imposed, and eventually the practice contributed toward the decline of our nation's waterfowl. The diary of one participant recorded the taking of 17,000 waterfowl. It wasn't until 1897 that the Pennsylvania legislature prohibited spring shooting.

Tucked between the commercialism of the market hunters occurring nearly until the turn of the century and the current restrictive waterfowling regulations of the '80s, lay a heyday for waterfowling. By the '40s migratory bird populations had rebounded and sport hunting was at its best.

How fortunate that during those

years I found my livelihood on the banks of the Susquehanna. The area I called home was the Columbia-Wrightsville crossing, an important commercial settlement during frontier days. It was here that east shore canal boats were floated across the river to the Wrightsville locks, here was built the historic covered bridge for carrying train and vehicular traffic across the river, here through the years, and indeed in the '40s, was the area where fishermen and waterfowlers converged in pursuit of their sports. Could it be here that my cherished passion to participate as a duck hunter would finally be vented?

Replenishing my hunting and fishing supplies introduced me to Nels. As proprietor of the local sporting goods store, my new acquaintance knew the ropes of the river. He understood the "river" jargon and was in the process of acquiring the elaborate inventory of Susquehanna River waterfowling equipment required to pursue open water hunting. An affinity developed between us. Nels frequented my home, and I engaged in many discussions at the Manning's sports shop. The groundwork was laid for a modest participation in duck hunting on my river during the '40s. I was invited to share the laborious chore of readying the equipment for the fall hunt.

The Chesapeake Bay and waterfowl-



**WATERFOWLING** as we knew it on the Susquehanna in the '40s has fallen on hard times. The loss of wetlands, extended droughts, lead poisoning and the like have reduced our waterfowl inventories.

ing are synonymous. It is, therefore, not by accident that the finest duck hunting supplies were crafted in its environs. Nels had connections, so one day our destination was Havre de Grace, Maryland. The objective was to order a scull boat.

There are two basic types of Susquehanna River sneak boats. The propulsion of the round bottom boat is done by use of an oar. By turning the craft on its side it serves as a moving blind shielding the rowing effort of the hunter. A flat bottom dinghy with screened sides is a variation of the traditional round bottom sneak boat. Nels, however, chose a scull boat.

The unit we ordered was a sturdy craft 18 feet long featuring two-foot flared sides. It was constructed of white pine and cedar. The ribbing was cut from oak. Upon completion a bystander questioned the seaworthiness of our boat. Its architect and builder affirmed, "I'll load it with a ton of coal, put two men in it and row it across the bay in any weather."

The scull oar is an exaggerated version of a rowing oar. Ours was 12 feet long and was installed for operation in

the boat's slanted transom scull oar hole. The hole was cut off center, three inches above the water line. Both the scull oar hole and the oar were leathered and lubricated to assure smooth and silent action. The propulsion motion of a scull oar is much like the muskrat's use of its tail when swimming.

Nel's unit was a "Cadillac" among the many boats on the river. It was easy to move, was comfortable for two hunters and, most importantly, was capable of handling any weather the river valley offered.

Migrations consist of a broad variety of waterfowl. With such a resource available, waterfowlers gear to intercept Canadas, brant and the many puddle and diving ducks. To accomplish their end, hunters employ a wide variety of decoy rigs.

Nels did things right, thus our destination was again Havre de Grace, and the establishment of Madison Mitchell. By using a World War I gun stock duplicating machine, Mitchell turned out realistic decoys from 12x12-inch white pine beams. His raw materials often came from discarded bridge timbers. Nels ordered 150 Mitchell canvasback



patterns. Those blocks made up the major spread for attracting diving ducks.

Several dozen hand-hewn canvas blocks were also acquired. Nels and I addressed the task of refurbishing them. Heads were revamped to resemble redheads, and appropriate lifelike painting was undertaken. We now had a second spread ready to float on opening day. But preparations were not yet finished. The complete waterfowler would exert every possible effort to attract puddle ducks. Nels acquired several dozen cork decoys which had retained their natural cork color. These were intended to attract mallard and black ducks specifically, and puddle ducks in general.

To all the above were added a dozen Canada geese blocks. In their long flight south, geese seek the river's open water to rest. Nels hoped his lifelike fakes would be noticed.

### Rigs Were Floated

To reserve our area of open water, a few decoys were placed several weeks before opening day. Old timers laid claim to a river area by usage; they were not particularly courteous to intruding newcomers. Several days before the zero hour, the stools were placed. Fifteen feet of quarter-inch manila rope was attached to a lead anchor and to each individual decoy. Our location was a half mile from shore. The three rigs—150 Mitchell canvasbacks, three dozen cork black imitations and several dozen redheads—were placed in three separate groups, 50 yards apart in an across-river formation. All was now ready. The rest was up to the birds.

Before dawn on opening day Nels and I were motoring toward our rigs. About 100 yards from them, the scull oar was put in place so we could move in on the decoy groups and possibly get shooting at any early flights that might have decoyed. After the initial run, the boat and hunters anchored at a buoy 150 yards up river from the blocks. When flights decoyed the boat was freed for another scull run on the live birds settling among the rig.

It was on one of those runs that I fulfilled my childhood obsession; I dropped a pair of cans. On successive hunts and later years I harvested 14 waterfowl species, including Canada geese and brant.

Waterfowling as we knew it on the Susquehanna in the '40s has fallen on hard times. The loss of wetlands, extended droughts, lead poisoning and the like have reduced our waterfowl inventories. A lot of water has flowed down our river in the past 45 years. Employment for Nels and for me demanded that each locate away from our river, effectively ending our Susquehanna waterfowling. Recently, however, we met in his den for a pow-wow about those days. We reviewed the ancient and recent legends of river waterfowling.

Much has changed since the 40s. Decoys today constitute an art form. They are more conspicuous on a museum shelf than they are afloat. Nels paid \$3.75 for a Mitchell canvasback, or, if he furnished five chunks of white pine from which to cut them, he got one free. My benefactor kept a few of his Mitchells for memory's sake; he has been offered \$250 apiece for them. Winchester's Model 12 pump gun and the Model 21 side-by-side are out of production; they are now collector's items. Nels used those two fine sporting arms interchangeably in the scull boat.

"Remember how hard we worked?" Nels quipped. Each morning after the hunt, dead eels, river grass and brush had to be cleared from the decoy ropes. When heavy rains fell the blocks had to be removed from the river. If they were left afloat brush would take them directly to the Bay. "We're too old now to do such work and handle the heavy plank boat," Nels observed.

To dream of eternal youth might be pleasant, and to perpetuate its joys might be fanciful, but it is a pointless pipedream. Fortunate are those among us who can reflect on happy realities. Reliving the waterfowl legends from the Susquehanna River flyway is one among my many.







# Big Bears for Both Brothers

By P J Bell

CHRIS AND JOE ADAMS have had a real hunting success in Luzerne County. Here where open timber gives way to thick clusters of rhododendron and hemlock, wildlife feeds off high-bush blueberry and acorns from the abundant scrub oak, and the Avoca hunters know where to find it. Chris, age 20, has taken a buck from this area each of the seven years he's been hunting, and Joe's known success in these woods, as well. But he'll be the first to say 1987 was different, special—better than ever before. That was the year the brothers each killed a black bear. Trophies. Each skull measured over 21 inches, which will give them high ratings in Pennsylvania's trophy records.

Thinking back, the brothers agree. They felt sure of success the night before the season opened.

"It's gonna happen," Joe said. "I can feel it. Me or you. Either way, it's coming out bear."

Chris placed his next day's lunch on the refrigerator's top shelf and nudged the door shut. His Woolrich jacket and pants hung by the back door. Everything was ready. "That's cause you and me know they're in there. Scouting for weeks. No one else ever in sight. If we see one, it's ours."

Joe leaned across the table and rapped his knuckles on the smooth wood surface. Once, twice, the hollow sound rolled off the finish. "So long as it moves our way," he said.

Each year it happened. The loud buzz ripped the silence, tearing morning from night, and the warm blanket tunnel was gone. Day looked square and still dark through the window, Chris thought. He noticed how frost framed the panes. The ground would be cold, at its hardest just before dawn. He pulled

wool on in layers, zipped and buttoned. Funny how leather and laces always came last. Finally, a light in the kitchen. Coffee and eggs, lots of toast. A knife fell, skidded fast across the floor. Chris looked to his father.

"This year I remembered and closed the door," the older man whispered.

Another swallow of coffee, the last piece of toast. They rose and gathered belongings, both conscious of movements, wanting to remember everything, knowing that—so long as they had guns and ammo—there'd be no turning back. Then they were ready. Rifles hoisted and a hand on the knob, they saw Joe coming along the drive. Lights out.

Somehow she knew, like she always knew when someone was sick or a day had gone badly, and her "good luck" carried with them out the door.

It was three miles to the parking spot. Joe drove, his face showing more concentration than the empty road needed. This was a three-day season. He and Chris would hunt first in the area they'd scouted. If nothing came of it, they'd use the next day to drive with their father and brothers Jeff and Paul.

They were on stand in good time. Light was just breaking. Chris positioned himself along the creek near a blowdown. A hundred yards distant, Joe waited on a ridge overlooking the swamp. By 7:30, the season had started. Shots scattered the squirrels, their passage the most action the brothers had seen all morning. Silence followed, hung an instant, then broke with a distant yell. "I got him!"

Later, Chris asked of his brother, "Where'd all those guys come from? Where were they last week, or last month for that matter?"

They sat out in the driveway, reluctant

to join the others inside around the big kitchen table.

"Remember my first hunt?" Chris asked. "You, me, Dad, Jeff? I shot a spike."

"Yeah. Jeff took a 4-point and Dad nailed that big 6-point that was such a load to drag out." Jeff nodded slowly. "I scored on my first hunt, too. A real thrill. It made being 12 suddenly seem all grown up."

"Too bad every year isn't like that."

"Enough, already." Joe laughed. "You're yanking my heart strings. Come on, Chris. Inside to plan strategy."



The setup for Tuesday was simple: post and drive. The Dessoyes and Olszwauski, the four brothers, and big Joseph Adams were flanking both sides of the swamp by 5:30 a.m. They'd headed out an hour before, ready and anxious. Chris carried his father's 30-06, a Model 700 Remington. The gun was in perfect condition, looking much as it had 28 years earlier when Chris's grandmother had presented it to her son. Chris considered the gun something of a good luck piece. His father had used it to take 28 bucks and one bear. Jeff had shot five or six deer with it; Joe'd killed a couple of bucks, and Chris himself had taken seven with it.

When daylight came full to the forest,

Jeff moved into the swamp. Except for an occasional overhead rustle, the morning sat still. Jeff knew where the others waited, but so far as he could see they never moved.

Joe sat in a pine, in the one tree he liked. Two branches had grown together, forming a seat which offered comfort as well as a view. He looked out over the swamp, his brand new 7mm Weatherby Vanguard ready. He knew Chris was close, but the growth was too thick to see him. Something moved to his right. Deer, he thought, and looked back to the swamp. He could just hear the stop-and-go crackle of Jeff's approach.

**HE SAW BEAR.** No sound or warning. Just there. The animal looked huge. Jeff froze and stared. Then some part of his brain registered that the animal was moving. The bulk surged away, dead ahead.

In the thick stuff at ground level, Jeff estimated he'd been moving about 10 minutes. He pushed a branch aside and slipped into a tiny clearing. He saw bear. No sound or warning. Just there. The animal looked huge. Jeff froze and stared. Then some part of his brain registered that the animal was moving. The bulk surged away, dead ahead. Jeff decided this forward direction took the kill out of his hands. He spoke loudly. The words sounded calm but carried far. "I've got one sighted. He's good size and moving just front of me. Chris, Joe, keep a lookout. I won't shoot from the rear."

Joe sighted the bear as it broke from the heavy scrub. Through his Tasco 3-9x, he could see the animal carried big bulk. Aim and squeeze. Movement and sound came together. The 150-grain Core-Lokt found muscle. The bear dropped to a crouch, and Joe bolted another cartridge into the chamber just as the animal started to move. This shot connected just back of the shoulder. Bear down!

"Was that you, Joe?"

"Yeah, me."



"Did you get him?"

"Yeah."

"Is he big?"

"Pretty big. I dunno. Average size, I guess."

Jeff came into the clearing. "Move away, brother, let me see."

Jeff and Joe stood for a moment, eyeing the bear.

"Cripes," Jeff muttered. He clapped his brother's shoulder, then yelled toward the swamp. "Hey, Pop, get a move on, Joe's got a big one!"

When Joseph Adams arrived, he just stood and stared at the bear. "He's a monster."

"Look at the head."

**THE CRITTER** was coming right for him, moving quickly. Chris aimed below the nose, between the shoulders and into the chest. He squeezed. The rifle blasted, the bear rolled.

"I didn't know Pennsylvania grew them this big"

"Say somethin', Joe."

Joe grinned and pointed. "We go that way to drag out."

A nearby access road made it possible to get Joe's four-wheel-drive pickup in, and Steve Girman and Mark Perrins agreed to help out. That made nine men for dragging the bear a distance of about 700 yards. Not far to walk, but with the load the job lasted over six hours. Each rest break was truly needed but also gave time for admiring. They all gathered round and talked about the size of the bear's head. Their awe was well-founded. The skull later measured in at  $21\frac{1}{16}$  inches. The hunters figured live weight at 450-plus. This tallied pretty closely with Tobyhanna's scale total of 390 pounds field dressed.

Much later, after all the hoopla had died down, the family decided Wednesday would be an all-day drive. It was another crisp, clear morning. Jeff and Chris posted from daybreak on, but nothing with fur was moving. Not anticipating any more luck for the season, the

group headed home for lunch. Soft drinks and sandwiches were the order of business when family friend Gene Garron came through the door.

"Come on, guys, let's get to hunting again."

"Go on," said Jeff from his spot by the window. The sun felt warm through the glass after all morning in shade.

"I know where there's a bear," Garron said, doing a quick head count, "But we're probably short one guy."

"Not any more." Jeff knocked on the window. "Mark Kremetski just pulled up."



Garron laid out the plan. Joe and big Joseph would drive. After posting Paul and Mark, Garron directed Jeff and Chris, telling them just where he thought the bear would pass if it headed their way. He was 100 percent right.

Chris had been on stand only a half-hour when he heard the first sharp notes of the drive. Somewhere ahead, his father was blowing into an empty cartridge case. Chris looked about, watching for movement. By this third day, he'd lost all impatience. He didn't expect to see a bear. Joe'd had great luck and there was always next year. The whistle sounded again just as he sighted the bear. The critter was coming right for him, moving quickly.



Chris aimed below the nose, between the shoulders and into the chest. He squeezed. The rifle blasted, the bear rolled. Chris bolted the gun. Black in the scope. He fired. Black again. Fire. Still rolling. Chris shot bullet four.

Jeff was again first to the scene. "Did you get him?"

"He's down, but not dead. Give me your 300 Magnum. I'm gonna finish this right."

When Joe arrived, he drew up short at the sight of the kill. He turned to Chris. "I was champion for no more than a day."

"This is the daddy of 'em all," Chris agreed. "I can't believe it, but he actually looks bigger than yours."

"He's 500 pounds, easy," Joe said. As

it turned out, his estimate was only 5 pounds over the actual live weight of Chris's bear.

Joseph felt mighty good as the proud father. What a season. Two monstrous bears killed by two of his sons. He wondered if such a thing had ever happened before in Pennsylvania. Undoubtedly other brothers had killed bears in the same season, but bears this big? He didn't know. Regardless, 1987 was a season for the Adams family to remember. Joseph's comment was less grandiose than his thoughts. "Good thing this bear's on his belly," he said. "With this carpet of leaves, maybe he'll slide right on out."

It wasn't that easy, but they did get Chris's bear out. Its field-dressed weight was 420 pounds, and later its skull was measured at  $21\frac{8}{16}$  inches, just  $\frac{6}{16}$  larger than Joe's trophy. "They're almost twins," someone said the next day, looking at the big bears hanging side by side. He wasn't far wrong.

Countless sportsmen came to view the trophies before they were taken to taxidermist John Freedom. He did a full mount of each. Was there lots of family reaction? You bet. At this writing, a new den was being built to show off both trophies.

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## Books in Brief...

(Order from publisher, not from Game Commission)

**Gun Digest**, 44th ed., ed. by Ken Warner, DBI Books, 4092 Commercial Ave., Northbrook, IL 60062, softbound, \$18.95. At 496 pages, this is the biggest *Gun Digest* ever, and as always it includes a wide variety of shooting-related subjects. In "The Big Bang," Bob Bell gives in depth coverage on the latest outfits for ultra long range competition and military sniping, custom rifles chambered for the 50-cal. Browning machine gun cartridge. At the other end of the power spectrum, Paul Matthews details his lifelong "Experiences With A Hornet." Earl Etter describes the advantages of multi-dot scope reticles, Pete Barrett tells about "A Trusty Pair for Africa"—two Model 70 Winchesters that served him well on numerous safaris—and Don Zutz comes up with a new way of quickly judging the efficiency of your shotgun patterns by examining only the annular ring. In a fond remembrance, Col. Charles Askins Jr., himself a famed gunnerman, recalls that "My Old Man Was A Pistol." There's much more, including the extensive reviews on new products by Layne Simpson, Hal Swiggett, Doc Carlson, Larry Sterett, Clay Harvey, Dean Grennell, Ed Matunas and others. And of course there's the large catalog section. Good useful information.





**TIM BYLER, left, (one of the twins) and Don Kaufman, right, got their birds on the opening day. By the following weekend Chuck Byler, Tom Byler, Sr., and Skip Fedigan, back row, and Tom Jr., had called in birds. Fedigan, in fact, got a hen with a four-inch beard.**

## A Real Turkey Hunt

By Thad Bukowski

**A**S TURKEY HUNTS GO, an outing last year was a howling success.

Getting to a flock to break up took some struggling, and downing a bird was even tougher, at least for those in our big crew who did connect.

Splashes of ocre daubs greeted my eyes. It looked as though huge paint-marks colored the hilltop trees after we turned onto the gravel road off Route 6 in Warren County.

This was foreign hunting country to me, and the hillsides and tumbling valley we entered were startlingly beautiful, reminiscent of Walt Disney's entrancing film, "Nature's Half Acre." I hadn't seen anything as pretty in awhile, and memories of the hunt's natural beauties still linger. I'm not sure what

road my companion took and whether I could find it readily by myself again, but pulling up to the ranch home was a wonder in itself.

Large chimney-type stone, perhaps gleaned from the nearby hillside, circled the structure waist high. Rustic board siding continued up to the eaves. The place was as comfortable inside as it was appealing outside, splashed occasionally by the morning sun. The cozy home, a farm-forest dwelling, was planted against one hillside. For the day it became our hunting headquarters.

The door showed an immediate kitchen and straight beyond it were lounging couches and the living room. A breakfast alcove opened wide-windowed to the left and overlooked the

entrancing valley and hardwood hills beyond. Serenely quiet just beyond the alcove outside were two private trout ponds. Although not a ripple was showing, the squaretails we fed that afternoon had pot-bellies. Ceiling rafters in the home held up by polished pine beams had empty wicker flower baskets and pots and pans hanging irregularly. The pans tinkled or clanged when a lumbering hunter banged against one now and then, depending on how hard he head-hit it.

Bedrooms were off to the right, hidden behind closed doors. I surmised that the three boys, twins Tim and Tom, now in their mid-20s, and elder brother Chuck, edging onto 30, had a Tom Sawyer existence growing up here. They must have, for my companion, Skip Fedigan of Harlansburg, who was bringing me here, informed me that one had been bitten badly by a rattlesnake just a few months earlier.

### Adventuresome

The kids had been adventuresome. They learned their turkey hunting after youthful and friendly rapport with a number of big birds kept in an expansive pen close to the barn at the pasture-field below.

I shook hands with owner Tom Byler Sr., when we met and, chubby as we both were, we each grabbed a glazed Danish off the huge pile in the alcove and munched it and had a fresh coffee before we lit out. I looked longingly over the valley, its one or two distant and bucolic homes and a faraway barn and silo.

Others gathered and soon there were chirpings and clucking practices with turkey mouth calls amidst considerable camaraderie and bits of bragging about previous successes.

Turkey hunting and rattlesnake chases were nigh onto religion in this valley, I learned. You best not bring a rifle along. It was taboo. Not ethical at all, they thought, to get a wild bird unless you called it within smokepole range.

Others arriving included Don Kauf-

man, an easy-going softspoken charmer from New Wilmington, and Rob Ostrander, a local lad.

Conversations about where the flocks might be ensued, and then the group finally scattered in twos or singly, heading for favorite hillside haunts. Only later did I learn that Kaufman and Byler Sr. had taken a Jeep up an old road on the same fat hogback mountain behind the house that I had to climb.

Skip pointed upwards and said, "We're trying the other side of 'that.'" "That," happened to be about a thousand steps straight up, and I hadn't counted on such an initiation. My heart pounded as we forged upward and my Medicare knees wobbled badly near the top. It felt as though they needed arthroscopic surgery when we finally got over the sometimes brambled giant hump.

I was mighty glad when Skip covered his head with a net mask and pointed his camouflaged shotgun to a lonely hemlock.

"Why don't you park there and hide while I circle around this big knob and call a bit," he said. "We really haven't seen any scratchings yet."

I leaned comfortably under the soft hemlock branches, avoiding the lower brittle deadshoots often used to initiate wood fires on cold and lonely hunting stands. Deadfalls lay irregularly around me, here and there, some old with colorful green mosses growing on them and even fern bits protruding. Others had been rapped by sapsuckers, birds which drank nectar from the wounds, and still more displayed small holes chiseled by other woodpeckers or worked over by ants, bees, wasps and termites.

Branches of witch hazle, dogwood, and wild blackberry waved just beyond, with shoots of beech and ironwood springing towards the sky. Amid those, sterling long cherry trunks and red, white and chestnut oak probed varying heights. I noted their leaves fluffed around me ankle deep on the ground. A few aged aspens, ready to crumble, maples and ash were also clustering the hillside.





**PULLING UP** to the ranch-style home was a wonder in itself. The place was as comfortable inside as it was appealing outside, splashed occasionally by the morning sun. For the day it became our hunting headquarters.

I was content, leaning my shotgun as I held the upper barrel easily with one hand and shifted from one leg to the other while my back was against the comforting tree.

Time passed quietly and I responded to it thoughtfully. Deliciously relaxed, away from traffic, turbulence, telephones or hurry and scurry, I vowed to get away more often.

Bang, bang, bang from the far point beyond snapped me to attention. I tensed, half-hoping that a stray bird might coast toward my hideout and my magnum No. 4s. It was a false hope. Another half hour had passed when a tail flag waving through the forest caught my eye. I couldn't tell whether it had antlers, anxiously thinking of the upcoming deer season.

Another deer followed, a hefty sleek doe. I admired it as it disappeared in the direction from which we had climbed the big hill.

I got sight of Skip momentarily as he maneuvered silently around the hilltop, his quiet calls occasionally reaching my ears. No responses. Another half hour of

forest silence was interrupted only by a flitting chickadee, which for awhile seemed to be searching for me under the hemlock.

I took a short walk and soon met up with Skip.

"I moved to get a better view of the area where those shots were fired," I explained.

"Oh, that was a guy who couldn't hold off. He came in off a road on the other side of the hill and then launched his turkey loads at a squirrel."

We sat a bit and time again passed quietly.

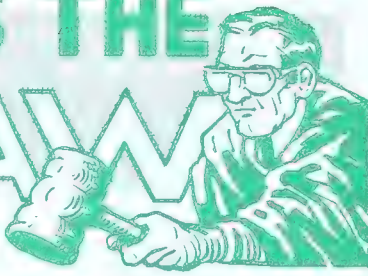
### No Sign

"No sign of any flock around here," Skip finally said. I echoed his sentiments.

"Haven't even seen any scratchings, except for those old ones along the Jeep path," I added.

"I can't understand it. We always find the birds here," Skip explained. "We'd better get down," he added. "It's getting towards lunchtime and I'd like to find out if anyone broke up a flock. We need

# IT'S THE LAW



## Question

May I spotlight during the archery and muzzleloader seasons?

## Answer

Yes, until 11 p.m. Recreational spotlighting is prohibited only during the regularly scheduled antlered and antlerless deer seasons and extensions.

a flock broken. The gang will take off again and we might not know if anybody happened on one."

Just as we approached the shed roof of a quasi-barn above the picturesque home, one of the twins came in yelling excitedly.

"A flatlander from Pittsburgh just broke up a flock, about 15 birds, and then left them," Tim yelled in amazement.

"Where?" A half dozen voices chorused. This was the initial signal for possible afternoon success.

## Up There, Too

"Up above the pines near the pumpkin patch and the slashings," Tim answered. I didn't know the area, but as hunters began to scatter, Skip yelled encouragingly, "We're headed up there, too."

"Not me," I answered as my knees creaked.

But Byler was pulling out a big tractor from the lean-to with a brush hog hanging behind it. Kaufman was holding tight onto the side of the 'hog.'

"Want on?" Byler yelled back at me, as the motor warmed. I climbed up and set my feet on the left side. The mixmaster ride up a twisting rock-strewn trail towards the pines above was a hang-on affair, but I was anxious to see how tur-

key experts operated. The flock was scattered and the callers were zeroing in near the spot. I wasn't disappointed.

The flatlander had left at the most important time.

"That's when you can readily bag a young-of-the-year bird," Skip had previously ventured. "Scattered young birds desperately want to find their way back to the comfort of the group. Those 12- to 15-pound birds'll gather by listening to each other's calls."

Kee kee or lost bird calls soon sounded out.

"Why don't you use the hen call, the one she uses to gather her flock?" I asked.

"Because there are many jakes and young hens calling to each other but there's only one boss hen. You've got a much better chance to attract a bird if he or she thinks it's another one of the brood. So you use the kee kee call, especially in the fall."

Byler hoped that our big cleated farm tractor would not disturb the birds. It huffed to a stop at a small flat, he parked it and we got off.

"If you want, you can go beyond that field towards the other ravine," Byler pointed westward. "That's where the other fellows are heading, up the other ravine." He and Kaufman moseyed due north towards a canopy of scattered hemlocks and some inviting slashings farther on.

I picked a substantial cherry trunk to rest against along my way up the winding mud trail that led to an old timothy field above. As it turned out, I should have remained at the cherry tree. But I pushed on, climbing, and got to the edge of the timothy clearing then onto the hillside facing the other ravine. I never got to see the pumpkin patch below.

Before long I heard faint chirping. It was one of the other callers trying to evoke an answer from a stray jake broken from the flock. The sounds came far from my left.

A broad scene of mixed forest again opened before me, with ankle deep leaves and occasional mushrooms lifting



from tangles of downed wood spaced between mature trees. Perhaps I might interrupt a jake or young hen, scurrying through this rubble, I thought. I had a good view. I sat down on my drop-seat coat and was almost covered by a spread of downed branches from a deadfall, but I was quickly interrupted.

Bang, bangety, bang! Three magnum-loud shots sound an exciting alarm in the direction where Kaufman and Byler Sr. had ventured. Then silence. Shortly, bang, again. The last one, I thought, might be a coup de grace.

Suddenly two figures lurched into view to my left, young Tim running uphill almost as fast as a deer towards the booming sounds, and Skip chugging afterwards.

They passed within 30 feet, but were so intent on turkeys they never noticed me. I thought at least one should have, as they practically stumbled over me.

I kept silent and watched as they climbed almost atop me. When they disappeared I chuckled. I must have been hidden well enough even for a turkey, I thought.

Silence reigned for another half hour or more, except for the rustling of the leaves remaining in the treetops. The wind swirled, moving the top branches around in semi-circles. A few creaked eerie pre-winter sounds, rubbing one branch against the other, back and forth. They groaned ghost-like. I listened contentedly.

After a wait I looked at my watch and saw it was past 2 p.m., so I slowly ambled downhill. I was expecting to find everybody back and eating inside, but I was wrong. These were Boone-type turkey hunters, and food was immaterial when a flock was on the run.

Only Kaufman and the local lad were there, sitting along the bench in front of the door, chewing at dry grass shoots. Kaufman had a faint smile on his face.

I finally asked why he had given up so early.

"Got a bird. A jake," he said quietly as though it was no big deal. But he fingered the grass chunk a bit and grinned, and then he took me around the side of

the house where a dandy bird lay, fully stretched in the shade.

"It must be close to 16 pounds," I said encouragingly.

"Naw, he won't go over 12," he minimized.

"Did you fire all those shots?" I asked.

"Yep," he answered. "Downed a bird but dang it, he took off running. Three other birds headed down that ravine where you stopped to rest at the cherry tree. I sat down and called. Pretty soon a head showed up, and I stopped this young jake on that last shot."

He searched through the bird's breast area.

"Sure enough, only about an inch long," he said as he grinned again. He spread the feathers to show where a tiny knotted hairbeard was beginning to grow on his young male quarry. But the bird indeed was a well fed, well filled out, meaty specimen.

### Tim Breezed In

Soon Tim breezed in. When he learned that Don had bagged a turkey he became real excited. He wolfed a cheese and chipped ham sandwich, gulped a glass of milk and disappeared in a couple of minutes, with his mom trying to stuff him a bit more.

We heard the rumblings of the tractor. Tom Sr. rode it into the lean-to, came up, learned about Don's bird and congratulated him. Then we all went in for a bite to eat.

Hot chili tasted smashing, and steaming hot dogs with onions and a volatile Greek peppery sauce also brought by Tom's wife Jane were even more energizing.

Jane just grinned quietly as one hunter after the other blurted out his morning's misadventure, amidst a few excuses.

Soon Tom Sr. grabbed a handy Jeep and I went along. That's when I learned that he and Kaufman tried to make turkey hunting a flat or downhill affair. My kind of turkey chaser, I thought.

"How'd you ever get involved with this big bird hunting clan?" I asked Kaufman, who still was looking to roam

the woods a bit, gunless. The Jeep made slow and tortuous movements over ditched areas as we climbed the hill I had walked so laboriously that morning.

"Oh, I've been a friend of Tom's for many years. We've chased quite a few gobblers and hens," Don explained.

We got out, I thanked Tom Sr. at the top of the ridge and said I'd work down towards the slashings and pines where the flock was originally scattered.

A few more shots rang out above the cutover timber scraps when I got there. It must be one of the boys or Skip, I thought.

Late that afternoon, Tim walked in proudly with a hen.

"Looks like a two-pounder," brother Chuck teased when he noted the displayed bird hanging prominently from the eaves at the corner of the house. Tim made sure all the others saw it as soon as they came in.

### Couple Pounds Bigger

"Yeah, at least a couple pounds bigger than yours, I note," Tim blurted back at Chuck. He reminded Chuck about the small New York hen, taken the week before by Chuck.

Skip, working with Tim, had the unusual experience of the afternoon. Tim and Skip were calling near each other and a jake bird suddenly appeared, heading cautiously for Tim's call.

"I was saying to myself, Tim, shoot that bird, he's in plain sight," Skip said afterwards, "I could have downed him with my eyes closed, he was that easy a shot. But he was Tim's bird."

"I never saw the bird," Tim countered. "I couldn't see him through the brush." He got his hen later, after he and Skip had split up. It came in to some kee kee calls.

"I should have shot that bird," Skip moaned when he learned that Tim had gotten the hen. "But he was Tim's and I had to hold off," Skip reminded us.

"At least you can continue hunting and you know you did right," I consoled.

Indeed, Chuck came in and convinced Skip to come back on Monday.

"That flock was shell-shocked today,"

Chuck said eagerly. "They weren't answering even right after they were scattered. They didn't know where they were or what they were doing so they just sat tight. They'll be oriented by Monday and they'll make good hunting then because they'll be anxious to get together again. I think they'll sit tight through Sunday. Maybe we'll be able to break up the other two flocks I know are around," he urged invitingly.

It was dark when the group said good-byes and headed their various ways. I hadn't been on a hunt with as fine a family gathering for many years, ever since the days our own clan gathered each fall season for often hilarious small game hunts.

That was when gramps and grandma owned a few farm acres. Grandma always took our three tykes out to feed the chickens, check Matilda the family cow, pet the barn cats and kittens, and even watch the three grunting hogs snort a bit, while the boys took off with the two excited beagles for the day's hunt.

Times sure have changed, I thought. But then again, I wasn't sure. I wondered whether a fire with the scent of pine and wild cherry crackled at the somewhat secluded mountain spot which I had just visited. I also wondered whether Tom Sr. was practicing his turkey calling. He just wasn't real good at it, like me. The mouth calls always tickle my tongue and I gag and sputter a lot.

By Wednesday of the following week, Tom Jr. had corralled a bird at a nearby game lands near Garlands, and Skip called me after the last Saturday of the season, when I wasn't able to make the last trip.

"You should have been there," he enthused. "I got a bearded hen and even Tom Sr. got a jake. A big flock was broken at the game lands west of Torpedo. There were turkeys flying all around and even sitting in the trees above us. Even you would have gotten one."

I laughed and remembered the old saying—you should have been here a week earlier . . . or a week later.



# *Ikes Converge on Harrisburg*

By Wendy Plowman

**T**HE IZAAK WALTON LEAGUE of America, the oldest conservation organization in the nation, met in Harrisburg for their 67th annual convention, July 18 through 21. In addition to workshops and conservation briefings ranging from wetlands protection, acid rain, and a wide variety of other environmental issues, the Ikes—as they are called—passed 23 national resolutions, including one on oil spill liability legislation that emphasizes spill prevention by providing strong financial incentives for companies to exercise extreme care in handling and transporting oil.

IWLA Executive Director Jack Lorenz stated in an interview that “Even though the Exxon spill has all the environmental organizations upset, I believe there is a plus side. It has made all citizens more aware of the importance of conservation—in every respect—whether it’s water, ducks, air—whatever.

Keynote speaker Norma Opgrand, Department of the Interior’s Chief of the Federal Duck Stamp Program, stated, “We are once again on hard ground and bad times, just as Ding Darling was back in 1934 when he created the Federal Duck Stamp Program. Duck populations have declined sharply from the levels of the 1970s . . . duck populations in prime nesting areas of the U.S. and Canada have continued near record low numbers this past spring.” She went on to say that breeding populations of ducks in all surveyed areas totaled just under 31 million, close to the levels of 1985, which is 8 percent lower than the 1988 breeding populations and 24 percent below the long-term average from 1955–88. Opgrand blames last year’s severe drought for this year’s depressed numbers and claims



**IWLA Executive Director Jack Lorenz is shown here purchasing a 1989 federal “Duck Stamp” during the conservation organization’s convention in Harrisburg last July. Looking on are Norma Opgrand, Chief of the Federal Duck Stamp program, and Malcom King, IWLA Maryland director.**

that an analysis of duck wings submitted by hunters confirms that there was an unusually low proportion of immature birds in last fall’s duck population.

Opgrand pointed out that because of Fish and Wildlife Service’s restrictive hunting regulations aimed at substantially reducing last fall’s duck harvest, waterfowlers harvested only 4.6 million ducks, a 50 percent reduction from the previous year’s 9.2 million. “Apparently, some waterfowl hunters chose either not to hunt or to reduce their hunting activity out of concern for the resource,” she stated. Overall, waterfowl hunters spent 31 percent fewer days hunting in 1988 (the season was 25 percent shorter) and Federal Duck Stamp Sales

## **GAMEcooking Tips**

### **Pheasant A La Lehman**

This recipe is adapted from a delicious baked chicken meal served to us at a hunting lodge in Pike County. We thought the marinade would be perfect with pheasant or any wild fowl, and it lived up to our expectations.

- 3 pheasant breasts
- 1 16-ounce can chopped pineapple
- 6-8 maraschino cherries
- zest of 1 orange
- ¼ cup triple sec

Wash and split the breasts. Combine remaining ingredients in a blender. Pour over breasts and marinate at room temperature 4 to 6 hours, then overnight in the refrigerator. Bring breasts and marinade to room temperature. Reserve 1 cup of the marinade.

Bake in remaining marinade at 250 degrees, covered, for 1 hour. Baste frequently. Uncover and bake 20 to 30 minutes more. Remove pheasant to heated platter. Heat remaining marinade and pour over breasts. Serve immediately. Serves 2 to 4.

— FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY

totaled only 1,247,600, a decline of 19 percent from 1987.

There are some hopeful signs, however. In addition to plentiful rainfall since late spring, along with an increasing number of farmers adopting conservation practices, the habitat restoration efforts of the North American Waterfowl Management Plan are beginning to take effect. At the Ikes conference, Opgrand announced the expansion of the Federal Duck Stamp Program as a medium to educate America's youth. She emphasized the importance of increasing program support by all Americans, not just waterfowlers.

The youth program is currently being developed by Dr. Joan Allemand of California, a recognized art critic and educator, who is finalizing a curriculum and the required materials. "The course material will be keyed to a waterfowl art contest (for teenagers in junior and senior high school) similar to the National Federal Duck Stamp Art Competition, but will include field trips for first hand observations and experience. Using waterfowl art as the medium, we hope to first excite the interest of the young people of America, and then to provide them with the means to understand and treasure our wetland resources," Opgrand explained. "The whole idea is to reach children and to make people aware of conservation at an earlier age."

Conclusively, Opgrand credited the Ikes in helping to raise half the money required—\$300,000—to buy a law enforcement helicopter for the U.S. Fish and Wildlife Service. The helicopter will be used to catch poachers on the wintering grounds along the Texas/Louisiana coast.

Other resolutions passed include restrictions on this year's duck harvest. "Since U.S. Fish and Wildlife Service figures show that this year's duck populations are lower than anticipated, we are again calling for a restricted duck hunting season to help the resource recover from the severe drought and continued habitat loss," stated Lorenz.

Affirming its position on the duck harvest last year, the League's 1989 resolution also calls for increased enforcement, additional funding for the North American Waterfowl Management Plan, and development of hunter education requirements for all waterfowl hunters. The League urges the four flyway councils to resist pressure for special seasons as a way to retain duck stamp revenue, and to join the League in encouraging the purchase of duck stamps and the appropriation of special short-term funding to ensure continuous waterfowl management, research and habitat restoration.

In recognition of the impact illegal hunting has had on duck populations,



the League passed a resolution calling for additional funding for the Law Enforcement Division of the U.S. Fish and Wildlife Service.

A panel discussion on the Chesapeake Bay and the Pennsylvania Connection was presented by Ralph Abele, former Executive Director of the Fish Commission, and Cynthia Adams Dunn, state coordinator for the Alliance for the Chesapeake Bay. Abele discussed the returning shad fishery to the Susquehanna River while Dunn pointed out the continued problems versus solutions in saving the Chesapeake. Linda Winter, IWLA Chesapeake Bay program director reported on IWLA programs, including Wetlands Watch, informational conferences, and Bay Watch with an 800 telephone number for reporting specific problems.

James MacKenzie, a senior associate for the World Resources Institute, talked about combating global warming and how the greenhouse effect caused by excess carbon dioxide emissions and other gases could create a climatic calamity.

The Pennsylvania Division of the



Izaak Walton League, with 12 chapters and nearly 2000 members, has worked to protect the state's diverse natural environment and promote ethical hunting and fishing practices for more than 60 years. Pennsylvania became the first state in the nation to require restoration of mining sites by coal companies through the efforts of a Pennsylvania member. Another significant accomplishment was the Schuylkill River designation as the state's first wild and scenic river. The division consistently has ranked as one of the 10 largest in the country. The York County Chapter, with 840 members, is also one of the nation's largest.

**GIB HAYES, second from right, past president of the Hecla Chapter of the National Wild Turkey Federation, presents \$100 checks to Westmoreland County WCO Joe Stefko, center, for forwarding to three area individuals who provided information that led to convictions in various turkey hunting violations. Tom Baldridge, right, is waiting to present rewards from the state NWTF chapter, while Deputies Len Honick and Ed Farzati, who were involved in some of the investigations, look on.**



# B U C K



**GEORGE GOOD**, Smicksburg, dropped this 170-pound 6-point on the opening day last year.



**PAT RUNK**, Strasburg, killed this big 11-point in Huntingdon County.



**DANIELLE STEWART**, above, Punxsutawney, used an old 303 British to drop this spike. Stephen Spinelli, Brooklyn, NY, found this 8-point on the last day of the season.



**LOIS SAGER**, above, Bradford, stayed in McKean County for this 4-point, her first buck. Mark Drop, below, Jeannette, was hunting on SGL 42 when he got this 8-point.



**PAUL**  
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**TOM HARLEMAN**, York, and his son **Scott** connected in Juniata County, hunting from the "Old No. 7 Hunting Lodge."



**RALPH GARBER**, above, Dover, used a 308 Winchester Model 88 to down this nice York County 8-point. **Barry Healey**, Landenberg, took this 170-pound 8-point in Lackawanna County.



**ROBBIE** and **HERMAN KEEHN**, McDonald, went over to Allegheny County to find these trophies, a 10-point and an 8-point.

# USTERS

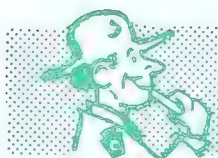
**Rogers-**  
**n Greene**  
**ening day**  
**perfect**

**GEORGE DENK**, Pittsburgh, is especially pleased with this Indiana County 8-point. It's his first buck in 15 years of hunting.



**HARRY SANKER**, Altoona, went over to Stone Valley in Huntingdon County for this 10-pointer.



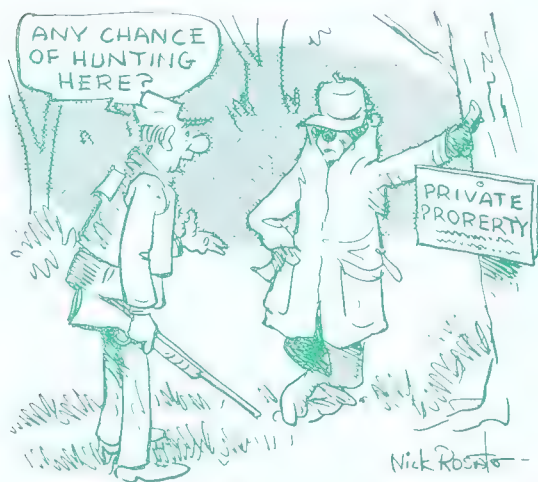


# FIELD NOTES



## Suspendsful

**PHILADELPHIA COUNTY**—Now I know what it's like to be a bridge inspector. Last spring I was kept busy retrieving and banding peregrine falcon chicks that kept falling out of their nests on city bridges. I can't say I enjoyed walking on catwalks hundreds of feet in the air, but helping these endangered birds make a comeback was certainly worthwhile. —WCO Richard J. Shire, Philadelphia.



## Hot Spot

**CARBON COUNTY**—This county supports an excellent population of black bears, and with more than 26,000 acres of state game lands, plus all the other lands open to public hunting here, there's plenty of opportunities for hunters. But please, if you hunt on private property, ask for permission. —WCO Richard E. Karper, Weatherly.

## Good Reclamation

**SOMERSET COUNTY**—Last March I visited a reclaimed strip mine site and heard nine woodcock singing. I then revisited the site in May and located three woodcock. I'm not sure what attracts the birds to this area, but there sure are plenty of them. —WCO D.W. Jenkins, Somerset.

## Sometimes

**WAYNE COUNTY**—Last summer I became a member of the region's goose trapping team. We trapped hundreds of nuisance geese from private property where they were causing problems, and gave them to other states for reintroduction purposes. The receiving states often reciprocate by giving us animals we need, bobwhite quail, for instance. This "two-way street" among wildlife agencies is a boon to sportsmen. It's a way of solving problems here and results in better opportunities for sportsmen at both ends. As the old saying goes, "A bird in the hand is worth two in the bush." —WCO John C. Shutkufski, Damascus.

## Flash Your Badge

**ERIE COUNTY**—My wife and I were out for a drive one evening when we noticed a mother skunk and her five young walking single file across a busy road. As we watched, the heavy traffic caused the group to separate, with the mother and one young on one side of the road and four young on the other. I walked toward the group of young skunks, hoping to drive them over to their mother, but, instead, they started following me. When I tried to nudge them to their mother they apparently misunderstood my intentions and ran off into the woods. I was out of uniform, so I guess they didn't recognize me as a wildlife conservation officer. Next time I'll just have to identify myself first. —WCO Shayne Hoachlander, Albion.

## And Then Enjoy Yourself

**JEFFERSON COUNTY**—Sportsmen, remember, before entering private land be sure you have the landowner's permission and know exactly where his boundary lines are. —WCO Kenneth J. Packard, Reynoldsville.



## Obviously

**SUSQUEHANNA COUNTY**—Not long ago Deputy Lawrence DeWolfe experienced severe physical problems and, as a result, major financial problems, too. Larry and his family handled their difficult times with courage and resolve, and the financial assistance they received from the Game Commission “family” will never be forgotten. What we always knew to be true was demonstrated again through this ordeal—there’s a lot of top-notch people working for the Pennsylvania Game Commission.—WCO Charles J. Arcovitch, Kingsley.

## Reputation’s Spreading

**BERKS COUNTY**—WCO Al Scott recently transferred here from Armstrong County, and until he got settled, he had been eating some meals at my house. I had been forewarned about Al’s ability to consume food, but I never gave the matter much thought until my wife came home from the store with the following story. She was at the meat counter, picked out a ham steak, and put it in the cart. As she began to walk away, our four-year-old daughter said, “Mom, if Mr. Scott is coming for supper tonight, you’ll need another piece of ham.” All kidding aside, a big welcome for Al is in order, and to all those who helped me cover the vacant district he has now filled, I extend my deepest gratitude.—WCO R.L. Prall, West Lawn.

## Safest Place Around

**TIOGA COUNTY**—One morning last summer my wife and I were sitting in the back yard, enjoying the sunshine and our coffee, when we noticed a sparrow fly from some bushes to a scarecrow in my garden. We walked over to the scarecrow, which has done a good job of keeping deer out of my garden, and found that the bird was building a nest under the scarecrow’s hat, a ten-gallon fluorescent orange cowboy hat I sometimes use in hunter education classes.—WCO Frank Bernstein, Middlebury Center.

## Like Clockwork

I was doing my monthly reports, which includes coming up with a Field Note, when it dawned on me that it was the 360th time I’ve faced this chore. Even after 30 years, it hasn’t gotten any easier.—LMO R.H. Muir, Kittanning.

## Help Out

**ARMSTRONG COUNTY**—Although it had been only three years since I received my first assignment, I found when coming here that I had forgotten what moving into a new district is really like. I hope the public will have a little patience with all us new guys, because we are certainly going to need it. And please, when relaying information to the 800 operators, be as complete and precise as possible. The response you get may be directly proportional to the exactness of your information.—WCO R.F. Weaver, Rural Valley.

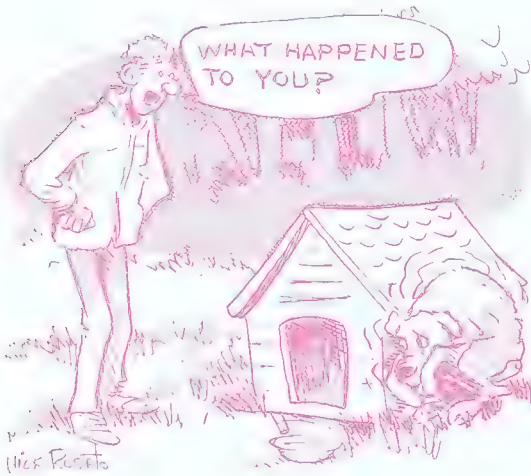


## Lasting Impressions

**SCHUYLKILL COUNTY**—After a bear knocked over his beehive the beekeeper set the hive back up and then moved his dog and its house to the scene, hoping old Rover would deter the marauding bruin. The next night, however, the bear returned and destroyed the hive. And Rover, who was tied only ten feet away at the time, still can’t get the hair to lay properly on his back and, I understand, now sleeps with one eye open.—WCO Steve Hower, Tremont.

## Or Butter

I was attending a Project Wild Facilitators Workshop at Crooked Creek Environmental Learning Center when a teacher related to me an experience she had had while teaching one of the lessons. She was discussing animal coverings—feathers and fur, for example—and asked the group what fish are covered with. Immediately somebody replied, “bread crumbs.”—IES Barry Moore, Saltsburg.



### “Man Bites Dog”

**LACKAWANNA COUNTY**—Al Uscowskas, Clarks Summit, was looking out his window when he saw a doe chasing a large dog—a cross between a Doberman and a German shepherd. When last seen as they entered a woodlot, the deer was gaining ground and the dog’s tongue was obviously dragging. I suspect the doe may have been defending a newborn fawn. Regardless, owners wouldn’t have to worry about their dogs being run down by deer (or vice versa) if they simply would not allow their pets to run free.—WCO Keith A. Snyder, Clarks Summit.

### Big Variety

**BUTLER COUNTY**—I was patrolling one day a few months ago and identified 22 species of birds, including a pair of bald eagles, and 20 species of wildflowers, including the rare blazing star, all on just SGL 95.—WCO David Donachy, West Sunbury.

## Big Improvement All Around

**ELK COUNTY**—Several people have complained to me about the agency’s toll-free phone system. They would rather call an officer’s home to ask questions, voice complaints, etc. I’ll readily admit that the new system’s not perfect. But then I think of the times I’ve received word over the radio about violations in progress that I’ve been able to respond to immediately, compared to the number of times under the old system when I got home only to turn on my telephone answering machine and hear old information about a problem miles away, often in the area where I had just come from. I’m also able to spend more time protecting wildlife, not answering the routine questions our dispatchers are now answering just as well and in a more timely fashion. All things considered, our new phone system has resulted in improved service to the public and our wildlife resources.—WCO Dick Bodenhorn, Ridgway.

### Be Reminded

**CHESTER COUNTY**—As we head into the bear and deer seasons, I’d like to remind everyone to wear fluorescent orange clothing (at least 250 square inches on the head, chest and back combined) and to hunt safely. Even though the number of hunting accidents has decreased significantly over the years, even one accident is one too many.—WCO William C. Ragosta, Nottingham.

### Police

Hollywood’s influence is evident almost everywhere, even hunter education. I was presenting the program “The Lost Child” at one of our hunter education camps and was at the slide where a young boy is obviously lost and his parents are discussing what to do. The next slide shows the father on the telephone, calling for assistance. Using that slide as my cue, I asked the class who the father was going to call. I immediately realized I was in trouble. In unison, the class screamed “ghostbusters.”—LMO Keith P. Sanford, Bloomsburg.



## Hey There, Bud

**CLEARFIELD COUNTY**—Deputy Jeff Colbey stopped on his way home from his regular job to pick up a road-killed deer. Afterwards, he pulled into a service station for gas and noticed a woman following him. She came up and began questioning Jeff about the deer, and wasn't satisfied that he was telling the truth until he showed her his badge. It sure is gratifying to know that some people are willing to help stop poachers, especially in an area known for violators. Thank you for caring, mam, and keep up the good work.—WCO Colleen M. Shannon, Luthersburg.

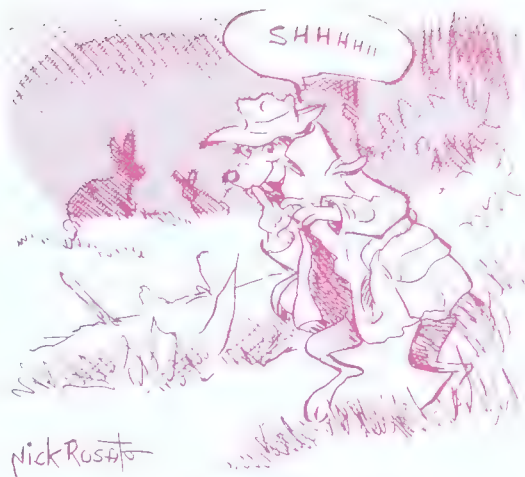
## Tricky Situations

**DAUPHIN COUNTY**—Removing a bear from a tree in a residential area is always a touchy job. We have to be careful not to injure the bear while, at the same time, making sure the bear doesn't injure any of the many spectators who always crowd around. Therefore, I'd like to thank the Halifax Fire Company and the Millersburg Cable Company for their assistance in accomplishing just that.—WCO S.R. Bills, Halifax.



## Or Looking for an Ark

**WASHINGTON COUNTY**—After 16 consecutive days of rain last May, I was quite amused to spot a woodchuck standing on the top of a fence post, apparently trying to dry himself out.—WCO R.M. Hough, Washington.



## Signs of Success

We must be doing something right on our rabbit management areas. Over the years I've seen more weasels on that game lands, SGL 227, than on all the others in my group combined. With the possible exception of mice, no prey with four legs can elude these little predators. They can go about anywhere. But because they're small and secretive, weasels are seldom mentioned when we discuss predation on game and other wildlife.—LMO Stephen L. Opet, Tamaqua.

## Expensive Tastes

**YORK COUNTY**—York Wildcare, an organization of about 50 volunteers who care for injured and abandoned wild animals, had five baby kingfishers to raise last summer, and the growing birds gobbled up \$7 worth of minnows a day—everyday.—G.J. Martin, Spring Grove.

## Everybody Benefits

**SOMERSET COUNTY**—This year, as they have every year since I've been here, the Quemahoning Rod and Gun Club sponsored a dinner for the land-owners who have their lands open to public hunting. I'm sure this gesture is appreciated, and as the conservation officer charged with enrolling lands in our public access programs, I know it's a great idea. Keep up the good work, guys, good public relations will never fail you.—WCO C.E. Guindon, Jr., Boswell.

## Trusting

**BLAIR COUNTY**—I was just heading out to go on patrol when a bird flew over and landed on my shoulder. I immediately called my family, and when they came out, the bird flew to my wife and then to each of the kids, one by one. My daughter, Stephanie offered it some garden raspberries, which the bird readily gobbled. Berries, it turned out, were a good choice because the bird was an immature cedar waxwing. It stayed around for three weeks, and every time I went to the garden it would make a couple of quick swoops and then land on either my shoulder or my head. Only after giving the waxwing some berries would it leave me alone. I don't know why this bird was so unafraid of us, but it sure provided some interesting moments for me and my family.—WCO Steve Kleiner, Altoona.

## Secondary Poisoning

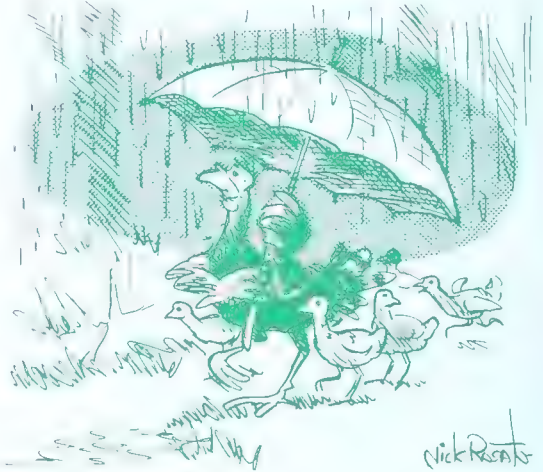
**BUTLER COUNTY**—Not long ago I was reading about how the chemicals many people have sprayed on their lawns end up killing songbirds. According to what I read, the birds die from eating insects forced to the ground surface by insecticides. I personally prefer the sounds of songbirds over a better manicured lawn. I also got to wondering how many times we've assumed sick raccoons had either distemper or rabies, when they may have been affected by lawn sprays instead.—WCO D.E. Hockenberry, East Butler.

## Just Makin' Sure

**INDIANA COUNTY**—I was standing outside my vehicle on a back road, observing a large flock of crows, when a male hummingbird flew up, hovered several inches from my left shoulder and then my right shoulder, and then flew up and inspected the red light on top of my Jeep. Several times I've seen hummingbirds attracted to my red light, but this was the first time one bothered to inspect my uniform first.—WCO Mel Schake, Indiana.

## So Pay Attention

**GREENE COUNTY**—As I, dressed in full uniform, was about to present a program about small animals to a group of preschoolers in Jefferson, the instructor, Kelly Adams, asked her class if they knew who would be speaking to them that day. In unison, they shouted, "A general."—WCO R.P. Shaffer, Carmichaels.



## Good Signs

**HUNTINGDON COUNTY**—The sightings of turkey poults and grouse chicks last summer indicate the birds fared well this year despite all the rain we received.—WCO D.J. Adams, Waterfall.

## Still In The Area

**DAUPHIN COUNTY**—Eleven years ago I arrived in this county as a recently graduated game protector. I learned much about the job over the years, but, more importantly, I learned a lot about people. I have many pleasant memories and some others I'd just as soon forget. By the time this is printed I will have transferred to a Bureau of Law Enforcement position at the Harrisburg headquarters office. I'd like to thank the many fine sportsmen and employees who helped me during the past decade, and I particularly want to thank the deputies who took me under the wing and made me welcome. Their friendship has meant everything to me.—WCO Skip Littwin, Hummelstown.



# Bear Season, November 20-22

For the fourth time since 1935, hunters will have a three-day season in which to take a black bear, Monday, Tuesday and Wednesday, November 20-22. The season will be open state-wide.

Last year, hunters took a record 1,614 during the three-day season, following harvests of 1,362 in 1986 and 1,556 in 1987.

"In recent years," according to Game Commission Wildlife Management Director Dale Sheffer, "we have felt hunters must remove at least 1,500 bears to keep the population stable, but the underharvests of 1985 (when only 1029 were taken) and 1986 resulted in expansion of the bear population, and we'd like to see a harvest of 2000 or more this year."

Although most bears are concentrated in northcentral and northeast Pennsylvania, their range is expanding in other areas.

This year, the commission authorized an unlimited number of bear licenses in the hope that more bears would be harvested. It will be helpful if the natural food supply keeps bears out of dens and available to hunters. Bear licenses are available at the Game Commission's Harrisburg headquarters, 2001 Elmerston Avenue, and at the six regional field offices.

Bear hunters are reminded they must wear at least 250 square inches of daylight fluorescent orange material on the



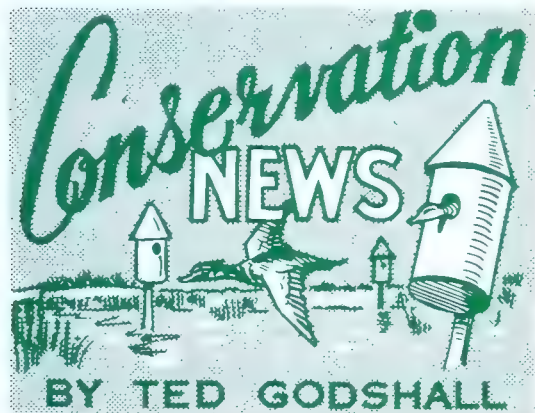
**THE SLEEPY HOLLOW CAMP GANG** went three for nine last year and passed up two cubs. Kneeling, left to right, are Randy Young, Dan Buchanan, Roger Moore, Eric Buchanan and Randy Wilson. Standing, Dick Fogel, Dan Reiber, Ron Houk and Kevin Mann.

head, chest and back combined. Five or more persons hunting together from a permanent camp must maintain a roster. Hunting together means driving. Staying together at camp does not require a roster.

## One Bear

A hunter may take only one bear. Shooting a bear in a den is unlawful. And under the Game and Wildlife Code, after taking a bear a hunter may not continue to participate in a bear hunt while carrying a loaded rifle or shotgun or a bow with nocked arrow.

When harvesting juvenile bears was legalized in 1980, the Game Commission indicated it would not encourage shooting of small bears, and the cautionary note is repeated this year. Although harvesting juveniles is a practical use of the resource which has no detrimental effect on future bear populations, many are concerned when they see small bears at check stations. Big bears close to the hunter are no problem, but similar-size bears, or a lone bear at a distance, can present a challenge to the discriminating hunter. A hunter just





can't tell if a bear is a juvenile or a small adult. Not all small bears are juveniles, and not all juveniles are small.

Each person who kills a bear must fill out the temporary tag supplied with the bear license and attach it to an ear. A three-inch stick placed in the mouth will hold it open and facilitate removal of a tooth at a check station.

Within 24 hours after harvest, all bears must be officially inspected and tagged at a check station. The metal tag must be attached to the head until the trophy has been tanned or mounted.

Hunters may take bears to any of the Game Commission's six regional offices or any of the 15 special bear check stations, which are at previous locations. The regional offices and the 15 stations will operate from 10 a.m. until 9 p.m. Monday, Tuesday and Wednesday, November 20-22. The six regional offices will be open Thursday, November 23, from 10 a.m. until 5 p.m.

Check stations are at the following locations:

#### **Northwest Pennsylvania**

Northeastern Forest Experiment Station, Routes 6 and 62, near Irvine, Warren County. Allegheny National Forest storage building, Marienville, Forest County. State Game Lands 54 (site of the former Game Commission training school), 7 miles northwest of Brockway off Route 28, Jefferson County.

#### **Southwest Pennsylvania**

Yellow Creek State Park, off Route 422, Indiana County.

#### **Northcentral Pennsylvania**

Trout Run, intersection of Routes 14 and 15, Lycoming County. State Game Lands 208, storage building, three miles north of Gaines on Route 349. S.B. Elliott State Park, off Route 153 just north of Exit #18 (Penfield) of Interstate Route 80, Clearfield County. Renovo Forestry Building, two miles west of Renovo on Route 120, Clinton County. Lantz Corners, intersection of Routes 6 and 219, McKean County. Sinnemahoning, intersection of Routes 120 and 872, Cameron County. Penn Nursery, on Route 322, south of Potters Mills, Centre County.

#### **Northeast Pennsylvania**

Monroeton Rod and Gun Club, just off Route 220 along Township Road T-402 between Kellogg and South Branch, just south of Monroeton, Bradford County.

State Game Lands 127, storage building, Route 432, two miles southwest of Tobyhanna, Monroe County.

State Game Lands 180, Shohola storage building, Route 6 at Shohola Falls, 13 miles south of Hawley, Pike County.

Forestry Building, 1.5 miles south of Hills Grove on Route 87, Sullivan County.

#### **Regional Offices**

Northwest Region: 1409 Pittsburgh Road, three miles south of Franklin, Venango County, on Route 8.

Northcentral Region: One and one-half miles south of Jersey Shore, Lycoming County, on Route 44.

Northeast Region: Dallas, Luzerne County, at the intersection of Routes 415 and 118.

Southwest Region: 339 W. Main St., Ligonier, Westmoreland County.

Southcentral Region: One mile west of Huntingdon on Route 22, Huntingdon County.

Southeast Region: Seven miles north of Reading, one mile off Route 222 on Snyder Road.



# Makes Good Sense

I WAS CRUISING I-80 the other day when a sports car whizzed by. His speed and his roar surprised me and broke the pleasant mood I was in, listening to the radio and admiring the central Pennsylvania scenery. Half a minute later another car streaked by, with a flashing red light on top. A mile down the road, both were pulled off to the side. One driver looked much more depressed than the other.

I could never see the point of driving that fast. Some drivers must think the speed limit is still 65, while others, like that sports car, tempt fate and the law by pushing beyond. I always found that for the few minutes I'd gain by speeding, it's not worth risking safety, a fat ticket, and having to watch for cars with bubbles on top hiding in the weeds. A trip is always simpler, cheaper, and more relaxing if I just drive the speed limit.

The Game Law is like that. To my mind, it's always an easier, less expensive, more enjoyable hunt if I stay within the law. Yet, year after year, the folks charged with enforcing our Game and Wildlife Code tally up a long list of those who disregard the rules. Like the criminal element in the rest of society, a number of those lawbreakers will always be with us. Indeed, some of the worst Game Law violators are in trouble with other law enforcement agencies for sundry shady dealings. A crook is a crook and some are simply incorrigible.

But there are others out there, who may have succumbed to the temptation a time or two, but are not hardened in their ways, or who are simply flirting with the idea that the law doesn't apply to them. They may just do what they dang well please this hunting season. They don't agree with the law anyway, and what would it hurt, if they put their wife's tag on the deer they shoot, they're just one person. There aren't enough "game wardens" to catch everyone, so why obey the Game Law?

Hold on! Before you go any further down that path to trouble, I've got one

word for you: anarchy. This is the prime reason, beyond many other good ones, why you should obey the Game Law.

Granted, manmade laws, including the Game Law, are not perfect. But in this imperfect world, they're the best we can do with the information available. They create order, a livable system, and we hope, some good. Disregard for the law results in disorder and confusion and harm to whatever the law is trying to protect. Sure you're just one individual snubbing your nose at the Game Law. But you're eroding the system. Like a building eaten away by termites, each little bite weakens the structure until it topples.

## Too Precious

I, for one, believe that wildlife is too precious to let that happen. The system of rules that govern the harvesting and protection of wild animals is worth obeying because it represents a solid structure, with the best interests of the resource as its corner stone. Of course the Game Law wasn't handed down from a mountain on stone tablets. But that's no reason to make up your own. As in all our lawmaking, there is a way to effect healthy change, through established channels and affiliations, like sportsmen's organizations. By not obeying the law as it's currently written, you're taking just one more block out from under a basically good building.

As for the "I'm just one person" reasoning, regard or disregard for the Game Law doesn't stop with you. How

## Another View...

by Linda Steiner



**BY BREAKING** the game law you're deprived of what makes a deer or gobbler a trophy and not just dead meat, and the cost is much greater than a fine—it's the loss of self respect.

can you tell that young person with whose upbringing you are charged that it's okay not to abide by the hunting rules? That child is going to interpret what you say in a much broader light. If he or she doesn't have to obey the Game Law, why obey traffic laws, or drunk driving laws, or laws against taking drugs? Or, why should they obey the rules in your own house and family? For the sake of that young person's future happiness, teach them that the law matters.

And what about safety? If you say it's okay to break other parts of the Game Law, aren't you sending the same message about firearm safety? Is that what you want for your child? What about your friend who poaches? How do his kids hunt? Would you want your son or daughter to go hunting with them?

As a hunter education instructor, I saw many fresh young faces come into the classroom. Some were the offspring of known Game Law violators. Our biggest fear, for wildlife and for those children, was that they would follow in their parent's footsteps. We knew how powerful the lure is to be "just like dad."

But we also knew that these young people were entering a critical time of their lives, when they were starting to think for themselves. They'd question

the accepted, and see role models beyond the immediate circle of family and friends. We instructors had only a few short hours, but we tried to show them there is another side, a prouder side, of being a law abiding sportsman.

Many of the kids in hunter education class were baseball or football fans, and we liked to use a comparison with those sports. A home run hit after the game doesn't count; neither does a touch-down. Wild game shot after hours doesn't "count" either. You may get it home without the "game warden" catching you, and it may have a big rack, but you still failed.

In your heart, we'd tell them, you'll always know you weren't good enough to win at hunting within the rules, so you had to cheat. You can lie to everyone else, but not yourself. By breaking the law, you were deprived of what makes a deer or gobbler a true trophy and not dead meat. The cost was much greater than a game fine. The price was your self respect.

Just like my cross state driving trip, I've found my hunting trips are a lot more enjoyable if I stay within the law. I begin when the little law booklet says I can, unload the gun at quitting time, stop when I've got my limit, and I have a comfortable, relaxed, satisfying day. There may not be a "warden behind every tree," but I feel better about myself, and about the effect I have on wildlife, by not having to look out for them.

So what if the buck doesn't show until after quitting time? If I'm half the hunter I think I am, I can always go back the next day and take him legally. Why obey the Game Law? It's the happier thing to do.



Deer hunting is very popular in Pennsylvania. What do you know about our state animal?

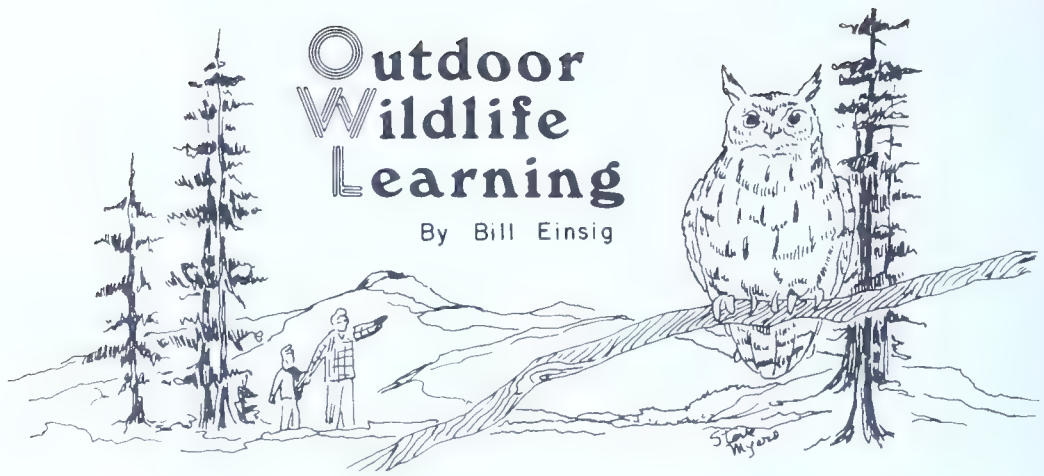
1. In the early 1900s, low deer populations were caused mainly by a loss of  $\frac{\quad}{8} \quad \frac{\quad}{1} \quad$ .
2. Don't wear anything colored  $\frac{\quad}{18} \quad \frac{\quad}{5}$  or brown while hunting deer.
3. What is the method the Game Commission uses to control the state's deer herd?  $\frac{\quad}{5} \quad \frac{\quad}{17} \quad$ .
4. Male deer begin growing antlers around  $\frac{\quad}{16}$  months of age.
5. Don't open fire on running deer, especially in an  $\frac{\quad}{12}$   $\frac{\quad}{6}$ .
6. Deer are capable of running  $\frac{\quad}{19}$  miles an hour.
7. Deer have poor  $\frac{\quad}{12}$ .
8. Use  $\frac{\quad}{3} \quad \frac{\quad}{14}$ , not a scope to identify a movement.
9. According to the game law, you must wear at least 250 square inches of fluorescent orange material on your back, chest, and  $\frac{\quad}{5}$  while hunting deer.
10. Young hunters must be accompanied by an adult while hunting *until* they reach the age of  $\frac{\quad}{15}$ .

Match the letters above the numbers with the corresponding blanks below. If your answers are correct, you will discover what every hunter should be.

$\frac{\quad}{3} \quad \frac{\quad}{12} \quad \frac{\quad}{17} \quad \frac{\quad}{14} \quad \frac{\quad}{16} \quad \frac{\quad}{5} \quad \frac{\quad}{12} \quad \frac{\quad}{17} \quad \frac{\quad}{15},$

$\frac{\quad}{16} \quad \frac{\quad}{14} \quad \frac{\quad}{17} \quad \frac{\quad}{15} \quad \frac{\quad}{16} \quad \frac{\quad}{18} \quad \frac{\quad}{12} \quad \frac{\quad}{14} \quad \frac{\quad}{16} \quad \frac{\quad}{8} \quad \frac{\quad}{19}$  and  $\frac{\quad}{15} \quad \frac{\quad}{1} \quad \frac{\quad}{6} \quad \frac{\quad}{5}.$

answers on page 64



## The National Aquarium in Baltimore:

### A Place to Visit and Much More

**T**HE NATIONAL AQUARIUM in Baltimore is an extraordinary place. It houses over 5000 animals that live in or near water. You can walk with sharks, watch performing beluga whales and play with starfish in a tidal pool. You can step into a steamy rain forest where bananas grow or trace the trickle of an Appalachian spring to the Atlantic coast. The Aquarium opens our view to new habitats and gives new perspectives to those we think we understand.

It is an ideal site for a family or school trip, although the emphasis for learning rests on the parent or teacher. There are no tour guides at the Aquarium to lead a class of youngsters through the exhibits. Some brief programs are offered in an auditorium or classroom setting for school groups, but guided lessons are not routinely conducted by Aquarium staff. Instead, the Aquarium's Education Department has taken a different approach, one that puts the responsibility where it belongs—on the group's leader.

Some teachers, those accustomed to handing over their classes to some "expert," may feel uncomfortable with this system. It involves a lot more teacher preparation. Other teachers realize the Aquarium is actually a learning resource made available for their use. In other words, the Aquarium staff wants to help

teachers teach, but not take over the teaching duties themselves.

As a way of supporting visiting instructors, the Aquarium has produced a wide array of materials that provide both background information and lesson activities for visiting teachers. Strangely, most of these materials are as useful to teachers NOT visiting as to those who are. Few of the teaching ideas are meant to actually be completed at the Aquarium itself. Most of the lessons either help students prepare for what they will see when they visit or help them analyze what they saw during the trip.

#### Program Booklets

Teachers who schedule programs at the Aquarium receive a booklet of information and activities to complement the program topic—sharks, puffins, coral reef, rain forest. These booklets are also available to teachers not attending Aquarium programs and are valuable for general classroom use. Their cost varies from \$2 to \$2.50.

#### Cutout Animal Kit

Students use the plans in this kit to assemble a shark, whale, horseshoe crab, manta ray and beaked coralfish. Use the completed projects to decorate your room, hall or school lobby. Cost \$4.



## **Puffin Report**

This school newsletter will come to your school three times each year. Each issue focuses on some aspect of marine life and keeps you informed of happenings at the Aquarium. Cost \$2 annual subscription.

## **The Changing Chesapeake**

This new publication from the Aquarium can be used as a text for a unit on the cultural and natural history of the Chesapeake Bay and its current problems. Written for upper elementary and middle school students, "The Changing Chesapeake" consists of brief student readings and activities they can do alone, in class, or with their families to learn more about the Chesapeake Bay. Cost, \$3.50, quantity discounts.

## **Living in Water**

This excellent compilation of 36 activities provides the core of a unit on aquatic science for upper elementary and middle school students. Teachers can also use this to supplement existing programs by selecting activities that cover only certain concepts.

The activities are arranged in five sections, each focused on a particular aspect of the aquatic realm.

Section One deals with basic chemistry, such as solutions, suspensions, salinity, density, dissolved gases and pollutants. Most of these are not traditional topics for elementary science classes, but these activities make the concepts easy to understand on a basic level.

Section Two helps students study the changes and effects of water temperature. Several activities explore the effects of seasonal changes on the temperature profiles of various kinds of water bodies. Other activities look at how living things respond to these changes and how the amount of dissolved oxygen is related to temperature.

Section Three looks at physical aspects of water, such as surface tension, current, and water pressure. Animals and plants distribute themselves in response to these and other factors, and the novel lessons in this section illustrate those influences.

Section Four focuses on the role of light in water. Not only does it provide the energy source for photosynthesis, light also permits vision and controls behavior—just as it does in our out-of-water world.

Finally, Section Five deals with ocean exploration and the need to communicate research findings.

Teachers will appreciate the practical lesson format obviously designed for the harried classroom teacher with limited background in aquatic science. Each section begins with several pages of background information to introduce the concepts involved in the activities that follow. Then, each activity "walks" the teacher through the lesson, step-by-step, and provides the most likely results while highlighting possible sources of error and confusion along the way. For example, when the authors suggest using inexpensive kitchen basters to transfer water samples, they caution "there is the chance that they will be used as squirt guns."

Ready-made worksheets accompany each activity that needs them, although teachers are encouraged to allow students to develop their own if time permits. The authors have thoughtfully included a completed worksheet with sample data and "expected" responses for each lesson. There is even a handy notecard for the teacher to use as a prompt during the class. It's obvious that the principal authors are practicing teachers and that the publishers give high priority to teacher "helps" that make the materials so useful.

## **Hands-on Activities**

A few activities in this curriculum are old favorites with a new face. Layering waters of different salinity or temperature densities has been described many times before, but that in no way diminishes the activity's value in this collection. The non-nonsense format may help teachers conduct such classic demonstrations better than before. Most of the lessons, however, are novel activities that teach fundamental concepts such as food webs, predation, migration and wildlife needs in new ways. They not only teach concepts, they do it in fun ways that get students directly involved.

## **Water, Water Everywhere**

Students often confuse various types of water habitats. Just what is the difference between a pond and a lake? A marsh and a swamp? What's an estuary?

This activity helps sort water habitats by directing students to classify them using a dichotomous key or a flowchart. Eighteen water habitat cards contain brief descriptions of aquatic habitats. Students read

Bear hunters, if you're fortunate enough to get a bear this year, please take care of its skull. Every year some irreplaceable trophies are needlessly damaged by butchers and taxidermists who don't realize the trophy significance of bear skulls. Don't let it happen to yours. Remind whomever processes your bear that its skull is not to be cut.

the descriptions then use the key, or flow-chart, to identify the water realm described on that card.

### **The Great Anadromous Fish Game**

Students become wildlife biologists in this activity as they monitor a school of 100,000 herring swimming from ocean to spawning grounds and then return to the ocean. Along the way, fishing nets, weather conditions, variable food supplies and pollutants pose hazards that reduce the size of the school. At the end of the game, students determine the trend in their school by comparing the numbers of adults going upstream to spawn with the number of young returning and suggest ways to stabilize the population. The hazard cards can then be modified and the game played again to determine the effect of each change.

### **Hide and Seek**

In this clever activity, students wear goggles of blue cellophane to simulate the vision of fish. Blue light penetrates water to greater depths than do the longer red and yellow wavelengths, so blue light is the predominant light available for vision

at certain depths. Red fish cutouts are placed around the room and the students are directed to locate as many as they can. Of course, what appears to be a bright red fish in full sunlight, now appears as a well-camouflaged dark fish in the blue light of the water world.

### **Getting to the Bottom of Things**

Almost any well equipped fishing boat sports a depth finder. Yet, the technology that produced these inexpensive units is very new. Much of what we know about the depths of coastal water and inland waterways was originally determined with a simple weighted line thrown over the side of a boat.

This activity demonstrates this old method of depth "sounding" by first building an ocean floor in a styrofoam cooler. Students then take a series of soundings, plot the depths and draw contours to show the bottom as they think it should be.

Living in Water was developed under a grant from the National Science Foundation. It, and the other materials described, are available from the National Aquarium in Baltimore, Education Department, Pier 3, 501 East Pratt Street, Baltimore, MD 21202. Payment must accompany your order.

When you visit or write to the Aquarium, ask for the Education Department's list of school publications. This list will include current prices and ordering information.

Finally, consider a trip to the Aquarium as a vital part of your aquatic unit. Try not to go in May, though, when scores of classes make their end-of-year fieldtrips. Visits in the fall and winter are less crowded and offer more opportunities for making real educational use of what the Aquarium provides.

## **Cover Painting By George Lavanish**

Squirrel hunting is a great way to spend an autumn day. Bushytails are abundant small game animals found throughout the state, and their wary ways make them challenging quarry, especially for the hunter with an accurate rimfire. According to Game Commission surveys, squirrels are the number one game animal here. Roughly two and a half million are taken every year by the half million or so nimrods who appreciate the fine sport they offer. Patience and good marksmanship are prime requisites to becoming a good squirrel hunter, and those same attributes will certainly pay off in the big game seasons, too. And keep your eyes and ears open. As portrayed in this cover, for every bushytail you see, there are a few around that you don't see.



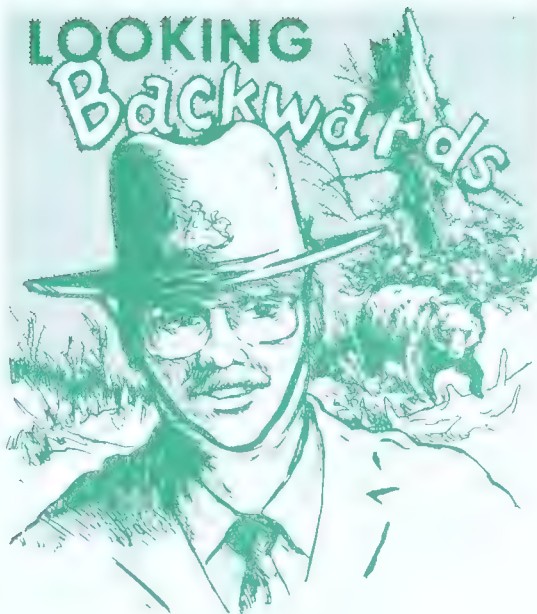
IT WAS UNSEASONABLY warm in the pre-dawn darkness on opening day of 1982's fall turkey season. Deputy Mark Niessner and I were sweating profusely by the time we paused to rest halfway up the steep side of Bald Eagle Mountain. Below us, lights in the village of Wingate and around the Bald Eagle School seemed small as they warded the community far below.

We didn't rest long for light was gathering in the east, and we wanted to be in position for our stakeout before daybreak. We were perhaps 50 yards below the place where we needed to cut into the woods when we heard a vehicle coming and saw the close-spaced headlights of a Jeep turn onto the pipeline we were climbing. We felt certain it was our suspect. The season didn't officially open until 9 a.m. but people hunting out of baited turkey blinds don't worry about minor details like that.

Adrenaline pumped into aching muscles and our lungs burned for oxygen as we frantically climbed for the woods. Like a childhood nightmare it seemed we were putting out a tremendous effort to go nowhere, while behind us the Jeep's engine grew louder as its headlights reached out for us. As we reached the edge of the woods we could hear rocks rolling and wheels spinning as the Jeep, fighting gravity, clawed into the mountain.

The baited blind was a hundred yards or so into the woods. It was a cozy little rock walled fort dug into a sidehill facing a small bench. Buckwheat had been scattered close in front of the blind, and turkeys had scratched the forest floor to the bone, feeding there. I had planned to use my flashlight to find the blind in the dark, and locate suitable observation posts on the hillside above and behind it before the hunter came in. But I had not counted on him driving to the front door in a Jeep. Now we were frantically scrambling up through the woods in the dark in the general direction of where I thought the blind to be. The straining engine grew louder and headlights began to flicker through the trees. Limbs slapped across our faces and jabbed at our eyes. I heard a crash and groan as Mark tripped over a log. We both fell several more times, slamming into rocks and trees as we went. I believe we left a trail of hide and blood in our wake as we ran. Then I couldn't hear the engine anymore.

We stopped, gasping into the morning



**By Jack Weaver**

**Wildlife Conservation Officer  
Centre County**

stillness like frenzied beasts. When I could, I whispered to Mark to wait here. He just nodded, eyes bulging, and collapsed on his knees. I eased forward a little. It was getting lighter. Then I could see the edge of a boulder field ahead that I knew spilled down the mountain just beyond the blind. As I waited I could hear someone approaching from below. Soon I could see the shadowy form of a man moving through the dimness. He was walking toward me on a small bench. Then he just disappeared, seemingly swallowed up by the mountain. The woods became very quiet.

We waited. The sky grew lighter. After awhile I motioned for Mark to wait and, stepping very carefully, I began to ease ahead through the dry leaves. A few steps, pause, then a few more. Now I could see some rocks directly below me where the bench tied into the mountain. And there, nestled behind the rocks, was the top of a camouflage hat. I sat down. Although I couldn't see the hat from my sitting position, I knew the blind was about 20 feet in front of me.

A half-hour passed. A cramp formed in my leg and a sharp rock bit into my backside, but I was afraid to move. Another half-hour passed in painful silence. My feet were numb, and now cramps in my neck and back conspired with the one in

my leg. At least it wasn't cold. My suspect was calling, and it was still nearly an hour until the season would open. He made a few yelps and then paused, followed by some other attempts at turkey noise. During one of these quiet periods a pure, clear series of yelps responded from over to our left, across the boulder field. Our hoofty stopped calling. After all, he didn't need to call much with all that buckwheat spread out in front of him. His was a waiting game, because eventually the birds would be in to feed anyway. It was a guaranteed deal. There was no element of fair play here at all.

Soon I could hear something walking through the leaves toward the blind, punctuated with a few yelps from time to time. Then a large turkey with a bright red head jumped up on some rocks and started running up the boulder field, calling as it came. It was circling behind the blind but heading straight toward me. Afraid to move my head, I followed the bird's progress with my eyeballs. Then just at the edge of my peripheral vision the bird seemed to freeze in mid-stride. The yelping stopped too. No movement. Silence. I was almost afraid to breathe. I thought my heart would burst out of my chest and lie there between my boots, thumping in the leaves. Turkeys do that to me anyway, but I wanted this bird to go to the blind. What better case could I get than watching my suspect shoot a turkey while it was standing knee deep in buckwheat in front of a blind?

But there was just silence. And this blurry, black shape about a dozen feet away, just at the extreme edge of my vision. Minutes passed, hours, weeks, years, a century. But my lying watch showed it was only 20 minutes in real

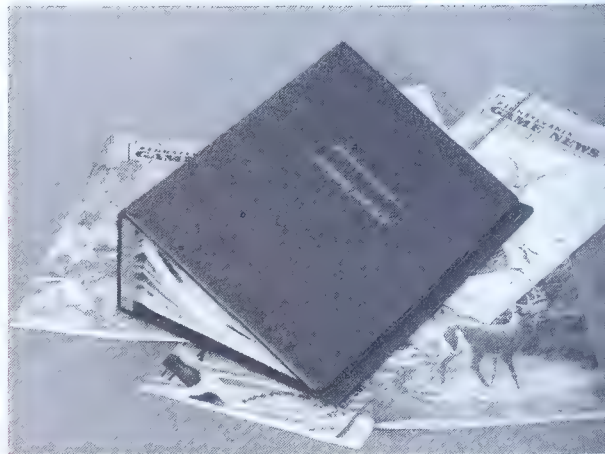
time. That shape must be a stump. Surely no turkey would just stand like that so long. Slowly, I began to crank my head to the left. A loud "putt" exploded in my face, and my stump ran across the boulder field, the sound of his passing fading into the woods to my left.

You blew it, dummy! I thought. But then my hoofty began calling again. He hadn't seen the bird and was probably wondering what in the world had happened. So he began casting about for an answer that I knew wasn't coming. I got shakily to my feet and held on to a tree to let the blood needle its way into numb, cramped limbs. I could see the top of the camo hat again, slowly turning left and right, and the black muzzle of a shotgun leaning against the stone-walled blind. I glanced back at Mark. He was on his feet waiting for me. It was about 9:15. Time to put a stop to this nonsense.

I waited until I was sure my legs would work and then dashed down through the woods toward the blind. The hunter must have thought an avalanche was falling in on him. He jumped up and turned around to see two hunters approaching. We were dressed in camo and carrying empty shotguns for that reason. Before he could speak he was staring at a bright silver badge and hearing the words, "State Game Protector." His jaw bounced off his boots as Mark arrived and secured his shotgun. He later settled on a field receipt for hunting turkeys out of a blind and over bait. We cut him a break for hunting prior to opening hour, but he watched in numb silence as we destroyed the blind.

Later, as Mark and I were moving back down the pipeline, I noticed two hunters dressed in camouflage squatting in the woods just off the line. Mark and I sort of

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sauntered over. I glimpsed a turkey lying in the shadows under a hemlock behind them. "Any luck?" I asked as conspiratorially as possible.

One of the men appeared to be in his mid-40s. The other turned out to be his son in his early 20s. Neither was very friendly. The older man said they were just waiting for a companion. They didn't mention the turkey behind them, which was unusual—or something was illegal. Being suspicious by nature and profession, I figured it was the latter. So formal introductions were initiated, much to their dismay. As it turned out, the turkey was untagged and its crop was full of scratch grain. But, of course, they didn't know anything about that. In fact, they weren't even sure exactly where they had killed the bird. I don't think I'd have wanted a game protector to see the spot either.

When I checked their shotguns, one was unplugged. In fact, it was loaded with five shells. I have learned from experience that people shooting over bait frequently hunt with unplugged guns. The name of the game seems to be, kill as many birds as quickly as you can. One year I found a blind, late in the season, where violators had fired so many rounds that they actually cut a four-inch aspen tree right off with their shot patterns. I learned later that a whole flock had been slaughtered over bait there. So I don't often cut turkey hunters with unplugged shotguns a break.

In fact, hunting turkeys over bait is so popular in central Pennsylvania that local feed stores start running ads for buckwheat, by the pound, in early October. During turkey season one radio station even broadcasts advertisements calling for turkey hunters to get their buckwheat, or scratch grain, at a certain mill. And one small grocery store in a rural community clears off a couple of shelves about two weeks prior to turkey season each year just to stock 10-pound bags of scratch grain. By the end of the season the bags are usually all sold out, and groceries go back on the shelves until the next season.

The locals don't call it baiting, of course. We call it that. Instead, they talk about "feeding" turkeys. But this feeding is only popular from October through November, which is also the height of the mast crop. And they feed no matter how thick the acorns fall.

Usually the illegal hunter carries small amounts of bait into the blind with him. A



few years ago two of my deputies were working a blind near Philipsburg. They went in early, but one of them was poking around in front of the blind, checking for evidence of fresh bait, when they heard the violator approaching. The deputy just had time to dive on the ground near some brush. When the violator came in he reached in his game pouch and pulled out a plastic bag. He then began broadcasting buckwheat in front of the blind, scattering liberal amounts over the deputy lying nearby. After he got in the blind the deputy was afraid to get up to apprehend the man for fear he'd be mistaken for a turkey. But the longer he lay there the more worried he became that some turkeys would come in, and he would become one of the flopping casualties. His partner, who was in the proper position behind the blind, let him sweat awhile before apprehending the violator.

But not all bait is distributed in small amounts. A camp on Rattlesnake Mountain was dumping over 700 pounds of wheat and oats each season. Each year, a few weeks prior to turkey season, fourteen to sixteen 50-pound bags of this grain would show up in an open shed behind the camp. By the time the season opened nothing would be left but empty bags. When we got on to it, we mistakenly searched the area for blinds, thinking that was where the bait would be. After two years of failure, we decided to stake out the camp each weekend prior to the season. After three days of stakeout, Deputy Ken Packard, who is now a WCO in Jefferson County, scored.

Ken watched as men from this camp came out and took up lookout stations by the road. While they watched for approaching vehicles, another man loaded several bags of grain into the back of a pickup. Then they all got in and drove down a trail across from the camp and

dumped several hundred pounds of oats on two piles, located in a large stand of mountain laurel. No wonder we couldn't find their bait before. Normally we would look for turkey bait in more open woods frequented by turkeys. But turkeys would certainly go into the laurel for the bait, and what could be a more natural blind than a stand of laurel? The final week prior to turkey season, we located two more piles, in laurel, on the hill directly behind their camp. Vehicle tracks led directly from their camp yard to these bait piles.

On opening day, Deputy Gib Moyer and I staked out these bait piles. At least these men waited until opening hour to start their illegal activity. We nearly froze in the meantime. Two men approached the baited hill. They were not using blinds, apparently relying on their generous amount of "feed" to lure turkeys into the general area of the laurel stand. One man took up a station within about 50 yards of one of the bait piles. He was out of my sight as I lay, dressed in camo, in a patch of laurel near one of the piles of oats.

Slipping a turkey call into my mouth, I thought I might elicit a response from this hunter. It would certainly help prove he was hunting and not just taking his gun for a walk. I made a few tentative yelps and waited. Nothing. I made a few more, and then I thought I heard a twig snap. I eased my head up and almost belched. The man was about 50 yards away and stalking

right toward me! I ducked down and held my breath. At that point I felt like a real turkey. I lay as still as I could, trying not to wiggle any brush, expecting a load of shot to come crashing through at any second. But the man turned and started back to his stand.

After a bit I could hear him calling on his own. Well, I thought, here's one turkey that isn't going to answer! After awhile I got up and approached this hunter. He was sitting in an opening between both bait piles, although he couldn't actually see the grain. His box call was out beside him, and he admitted that he was calling with it. The other man was apprehended by Deputy Moyer when he made his second pass by the other bait pile. Both men were later cited for hunting wildlife over a baited area. They were both found not guilty at a hearing before a local magistrate a month later. Not everyone feels the way we do about wildlife violations.

The blind that each violator builds is a character study in itself. Each builder has a preferred style. It's sort of like leaving your own personal signature in the woods. Blinds come in all shapes, sizes and models. They range from elaborate stone or log forts, to pit blinds, stick lean-to's, and some that look like giant bird's nests. In fact, they are so unusual and varied I photographed them and created a special slide program that I titled "Hoofy Architecture."

## Books in Brief...

(Order from publisher, not from Game Commission)

**Shooter's Bible**, No. 81, ed. by William S. Jarrett, Stoeger Publishing Co., 55 Ruta Court, South Hackensack, NJ 07606, 575 pp., softbound, \$16.95. Most of this large book consists of a large catalog which shows the latest firearms and related items such as ammunition, scopes, reloading components, outdoor books, etc. Over the decades, such material has made *Shooter's Bible* a standard reference. Additionally, a number of informative articles are presented. These include Don Lewis's "Chamber Pressure: Friend or Enemy?", Jim Casada's "Jack O'Connor: America's Greatest Gun Writer," and Norm Johnson's "Bullet Performance on Deer."

**Ruffed Grouse and Woodcock**, by John Alden Knight, Gunnerman Press, P.O. Box 4292, Auburn Hills, MI 48057, 271 pp., and 200 pp., respectively. \$21.95 each. Reprints of sporting volumes first published more than 40 years ago, these two classics are just as timely today as ever. And because the author—who developed the Solunar Tables still published and used by sportsmen today—lived in Williamsport, these books have a very pronounced Pennsylvania flavor. The places mentioned and people referred to—Bennett, English and Studholme—are familiar to many. Each book covers the species, its habits and management, hunting equipment and techniques. Two good books, especially for enthusiasts of Pennsylvania coverts.



**E**ACH YEAR around this time I plan to review a batch of books—new titles and old favorites, paperback and hardbound. Books make great Christmas gifts; what better way to spend a January night than curled up in front of the hearth with a good book? Here are five worthy candidates.

**The Rites of Autumn.** By Dan O'Brien. Atlantic Monthly Press, 19 Union Square West, New York, 192 pages, \$17.95, hardbound.

In 1965, Dan O'Brien saw his first peregrine falcon on a Gulf of Mexico beach. "It came from somewhere very high," he writes, "and its stoop was long and flat. . . . The speed was too much for me to register. There was only the flat trajectory, the sense that the sanderlings were under attack and the certainty that escape was out of the question."

Twenty-one years later, O'Brien was an endangered species biologist working for The Peregrine Fund, which bred falcons in captivity and released, or "hacked," the young in the wild. On O'Brien's last hacking in Montana in 1986, a golden eagle killed and ate three of the four young peregrines and would surely have gotten the fourth, except that O'Brien trapped the falcon and removed it.

The young bird had lost its chance at freedom. It was destined to be a breeder, since its introduction to the world had failed. But O'Brien thought it essential that this particular peregrine—he named her Dolly—"be given the chance to become what her genes had prepared her to be." He decided to teach her to hunt, and to carry her south with the autumnal avian migration, following the falcons' natural prey—ducks, passerines, shorebirds—to the Gulf of Mexico, where he would finally set her free.

The writing in *The Rites of Autumn* is not quite seamless, but the story is compelling and well told. From the high plains of Wyoming to Padre Island in Texas, O'Brien describes people (falconers, hunters, city dwellers in the boom-

# Thornapples

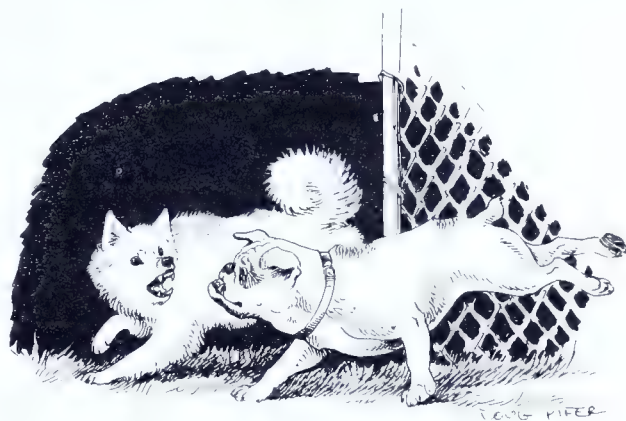


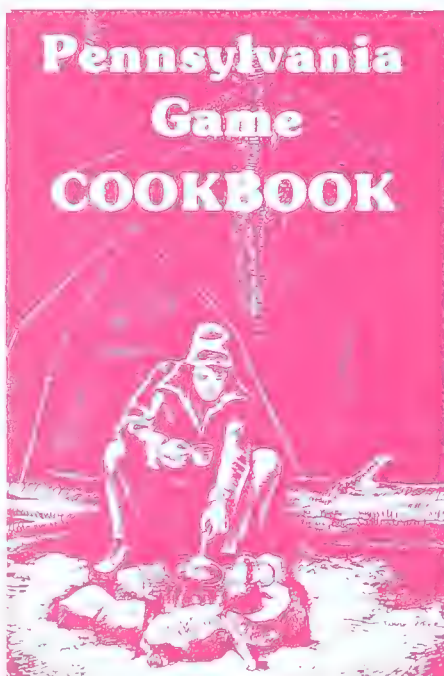
*Chuck Fergus*

ing American West), places, creatures, and their relationships. His book takes the reader along on a poignant migration through the dwindling wilds of the West.

**Man Meets Dog.** By Konrad Lorenz. Penguin Books, Viking, 40 W. 23rd St., New York, NY 10010, 198 pages, \$6.95, paperback.

Earlier this year, Konrad Lorenz, the Nobel prize-winning Austrian animal behaviorist, died. Over his long life he had kept as pets (no, the word is not quite accurate)—had kept as *friends* many sorts of creatures: monkeys, geese, ravens, badgers, lemurs, cats, dogs. *Man Meets Dog*, originally published in 1953, closely examines the humankind-canine relationship: "There is no domestic animal which has so radically altered its whole way of living, indeed its whole sphere of interests, that





**Pennsylvania Game Cookbook** is a 96-page collection of delicious recipes submitted by **GAME NEWS** readers. It includes methods of preparing all kinds of game available in Pennsylvania, plus some recipes for moose, elk, and other species. \$4.00 delivered from **GAME NEWS** office.

has become domestic in so true a sense as the dog.”

From Lorenz’s fictionalized account of the first tentative partnership between Stone Age man and the golden jackal, to his perceptive analysis of modern dog behavior (rooted, as one might expect, in the behavior patterns of the ancestral jackal and wolf), the writing is educating and entertaining.

The book has many humorous passages, as when two mortal enemies (Lorenz’s bulldog and a neighbor’s Spitz) go racing along on either side of a fence, trading snarls, until they reach a point where the fence has been temporarily dismantled and carted off for repairs. “There they stood with bristling hair and brutally bared fangs and—there

was no fence. Immediately their barking ceased. And now, what did they do? As one dog, they turned about and rushed flank to flank back to the still remaining fence where they recommenced their barking as though nothing had happened.”

As a lover of dogs, I have read and reread this book. I agree with Lorenz’s assessment of the female canine: “A bitch is more faithful than a dog, the intricacies of her mind are finer, richer, and more complex than his, and her intelligence is generally greater.” I have used his observations as training maxims: “At all costs we must make the animal feel that he is not obliged but permitted to carry out the exercise in question.” And I understand him completely when he writes: “The bond with a true dog is as lasting as the ties of this earth can ever be.”

**Rivers of Pennsylvania.** By Tim Palmer. Penn State Press, 215 Wagner Bldg., University Park, PA 16802, 229 pages, \$18.95, hardbound; \$12.95, paperback.

Another title for this book might have been “The Shining Life of the Land,” which is how Tim Palmer describes free-running rivers. Palmer is a canoeist, an ex-county planner, an ex-Pennsylvanian now living in various places throughout the West, still writing about moving water. This, his first book, and a good one, remains available nine years after its publication.

*Rivers of Pennsylvania* is an overview of the Keystone State’s watercourses, the wild and the placid, the clean and the polluted, rivers used, abused, and endangered. Did you know that if you begin at the mouth of the Mississippi and journey northward by always following the larger fork of the stream, you will eventually arrive in Potter County? That streams of the northcentral highlands are the wildest and least-developed waters between New York and Chicago? That water flowing in the Schuylkill gets used by humans six different times, and by the year 2020 will be used eight or maybe 16 times?





The book contains a wealth of information for canoeists, hikers, fishermen, and conservationists. (The first-person description of canoe trips makes especially good reading.) It explores the conundrum that when a river is cleansed of acid mine pollution, it often becomes threatened anew as agencies respond to public pressure to build dams for fishing and flatwater (read "motorboat") recreation.

The book cites unsolved problems and challenges, and urges foresight to balance development, recreational needs, and environmental safeguards. And it advances a most reasonable ethic for "the value and need of wild places, the beauty and meaning that can come from a part of the earth where rivers flow free. This is an interest not quantified in a system that calculates benefits and costs."

**The Bear Hunter's Century.** By Paul Schullery. Dodd, Mead & Company, 71 Fifth Avenue, New York, NY 10003, 252 pages, \$19.95 hardbound.

Ten famous bear hunters—"a diverse lot, ranging from a governor and a president to paupers and social misfits"—are profiled in this work by Paul Schullery.

The bear hunter's century, says Schullery, spanned the years 1820 to 1920, when much of the country was still wild enough to support large numbers of black and grizzly bears, and when game laws were lax or nonexistent, allowing certain exceptional individuals to de-

velop amazing hunting skills through killing literally hundreds of bears.

*The Bear Hunter's Century* examines the often inaccurate lore of bear hunting, and the social significance of this most exciting of field sports. It presents, in an historical context, information about biology. (Grizzly Adams, as well as taming several grizzlies and promenading them through the streets of San Francisco, observed: "Every year a ring is added to [a bear's] tusks, the first ring being for the second year; and as the animal sometimes reaches the age of fifteen or sixteen years, a corresponding number of rings are found"—biologists would "discover" this fact nearly a century later.)

The three best chapters profile three disparate characters: Ben Lilly, who from 1882 until the late 1920s hunted in the South and the Southwest, a tireless, athletic man whose zeal to kill bears and other "varmints" approached the pathological; Theodore Roosevelt, a marvelous observer, a first-rate writer, and an admirable conservationist; and Holt Collier, a black Mississippian and a former slave, held as an equal among whites, who once crawled into a hollow log wherein a black bear was dismantling his dog pack, and killed the bruin with a knife.

Schullery's book is well-researched. Its tone is conversational, witty, and highly readable. What bothers me is the lack of drama: we are simply told about these bear hunts, rather than privileged

## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

to experience them. The chapter on Holt Collier begins: "The pack of bear hounds ran through the thick forest in long, stretching leaps, their motion a combination of frenetic excitement and smooth, conditioned ease." Unfortunately, this is the only segment in which we truly begin to *feel* what it is like to close quarters with a bear.

**Deep Enough for Ivorybills.** By James Kilgo. Algonquin Books of Chapel Hill, P.O. Box 2225, Chapel Hill, NC, 27515, 193 pp., \$14.95, hardbound; Anchor/Doubleday, 666 5th Ave., New York, NY 10103, \$7.95, paperback.

These 13 essays by a University of

Georgia English professor describe a man falling under the spell of the outdoors. James Kilgo comes to hunting (in a serious way) late in his life, which is good, because it makes him examine why he feels so drawn to hunting, and to the "riverswamp," the rich bottomland forest along the Great Pee Dee River in South Carolina.

The book introduces us to Kilgo's frequent partner, Billy Claypoole, who says of hunting deer: "It's sort of like a dance. Only you let the buck do the leading." To Jack Bass, with Kilgo and Claypoole a member of a rod and gun club on an old plantation along the Pee Dee: "If a person doesn't know he's lost — I mean, if he forgets he's lost or doesn't care whether he is or not — can you really say he is lost?" Kilgo's son kills his first buck and tells the story to the club members gathered around the fireplace in the lodge; and an old black man helps the author find the Revolutionary-era grave of one of Kilgo's forebears.

*Deep Enough for Ivorybills* (the title refers to the author's desire to achieve the wildest depths of the swamp, where these thought-to-be-extinct woodpeckers may yet dwell) is honest writing in a plain and decent prose. Interwoven with the vivid descriptions of action is a constant elegiac examination of the author's place as a human hunter—as one of a long line of human hunters—in nature.

## Woodworking for Wildlife Homes for Birds and Mammals

The Pennsylvania Wild Resource Conservation Fund (income tax checkoff fund) and the Game Commission have produced a 60-page booklet full of detailed plans and related information for people interested in building and erecting wildlife nesting devices. From bluebirds, screech owls and ospreys to raccoons, squirrels and even turtles, easy to follow directions for building 22 proven homes and other devices for wildlife are provided. Order *Woodworking for Wildlife* from the Game Commission, Department AR, 2001 Elmerton Avenue, Harrisburg, PA 17110-9797. Price is \$3 each, delivered.



# The Art of Archery

By Keith C. Schuyler

**"TRULY INSTINCTIVE** shooting, to the extent of its limited refinements, is of aid only to the bow hunter."

That statement comes from "Instinctive Shooting," the first and only GAME NEWS column I've written on the subject. It appeared in the March, 1965 issue. The reason there was no follow-up on this early phase of archery, which has carried forth into the last half of this century, was simply because the inventive mind of man found better ways to get an arrow into the target. As the popularity of competitive archery shooting increased, however, "truly instinctive shooting" *almost* fell by the wayside. But it is, perhaps, sadly true yet today that it "is of aid only to the bow hunter."

Nevertheless, instinctive shooting has survived. Further, it is enjoying some resurgence among those who look upon it as the ultimate challenge in archery hunting. A prime example of one who sticks to and has been quite successful with the ancient system is Arlen Payne, Hetlerville, who has adapted it even to the compound bow. More on him later.

The vast majority of today's archers would have difficulty equating their style of shooting to the instinctive style. From an equipment standpoint, it means there can be absolutely no marks on either bow or string that will aid in judging distances. In fact, an instinctive shooter pays little or no attention to any part of the bow itself.

Then how does one shoot instinctively?

The answer to that question is almost as challenging as the hunting sport. There have been many attempts to define it.

Some archers appear to just pull up and shoot, releasing the instant any part of the string hand touches an anchor



**ARLEN PAYNE**, Hetlerville, has developed his instinctive shooting skills to such an extent that he's become proficient with all three types of bows, including the recurve shown here.

point. It has been called "picture shooting," a system that permits the eyes and the brain to compute all visual factors in an instant and coordinate release of the arrow with them. There is no conscious aiming. It is rather, I think, like a pitcher delivering a baseball.

Others use the "gap" system, wherein the head of the arrow serves as a reference point. It is held on, below, or above the intended point of impact at release.



**PAYNE'S favorite hunting bow is this longbow, with which he uses tapered wooden shafts. Here he's shown during a practice session, something he does at every opportunity.**

Any other instinctive system for hunting is a variation of one of these methods.

The late Howard Hill described his instinctive method as "split vision or secondary aiming," or "the indirect method of aiming," in words best understood by himself. Those who excel at instinctive shooting have trouble explaining just how they do it. The Reverend Tracey Groscup, famous for shooting thrown aspirin tablets with an arrow, as well as many other seemingly impossible aerial shots, compares his method of shooting with simply pointing a finger at what you want to hit.

Whatever method is used, consciously or without any deliberation, lateral movement as well as vertical movement must be controlled. Some get excellent accuracy at relatively short distances by using the three-fingers-under draw, in which they look directly down the arrow shaft.

Competition in any sport is healthy. Unfortunately, back in the mid-'60s,

personal achievement for some began to supplant the desire for good clean fun, and cheats soon threatened the instinctive class of shooting for competitive purposes. In the early days of field tournaments, shooting stakes were placed at unknown distances. But marks on bows that acted as sights, face walking, string walking, moving draw fingers over and under the string nock, and other means were devised to beat the system. Some even measured distances on courses from shooting stakes to targets and then sold the data to entrants before a match.

At the time, rules developed by the National Field Archery Association were accepted by National Archery Association. In December, 1965, Sherwood Schock, then editor of TAM (The Archery Magazine) and Archery World published an amendment to NFAA's handbook which outlined the problems they had enforcing the rules when it came to instinctive shooting: "Archers shooting in any division requiring Instinctive shooting must use bows free from any sights, marks, protuberances or blemishes which could be used for aiming. The inside belly of the upper limb and the lateral side of the sight window starting one half inch above the surface upon which the arrow rests shall be completely free of all protuberances, marks, blemishes, trade mark, etc. The ends or edges of laminated pieces appearing on the inside of the upper limb shall be considered a sighting mechanism. The bow string shall be of one color. The serving may be of a different color than that of the bow string providing the serving is of one color. There

**STRAIGHT**  
FROM THE BOWSTRING



**USE OF A fairly high anchor point aids in using the "gap" aiming technique, wherein the head of the arrow serves as a reference point, held on, above or below the intended point of impact.**

shall be no hanging threads. There shall not be more than one nocking point!" A second amendment read: "The upper portion of the sight window must blend into the upper limb in such a manner as to provide no sighting point."

Aside from the historical interest those amendments provide, they illustrate the difficulties of policing instinctive shooting. It was not a problem typical to Pennsylvania. Things became so bad in western states that a move was made to eliminate instinctive shooting and substitute "bare bow" as a class. The idea spread, and it marked the end of instinctive shooting for competition as we knew it.

Hunters, however, were not concerned with the niceties of tournament rules. They just wanted to kill deer with the bow in any legal and humane way possible. Today, a growing number disgruntled and confused by the profusion of "gadgets" that have all but wrecked the romance associated with the sport of hunting with the bow and arrow want to do it the *old* way.

That brings us back to Arlen Payne who admittedly falls into the group of those who resist the so-called advances in archery. In fact, he has always been an instinctive archer. Does well, too, as verified by tournament records. Although he shoots competitively in the bare bow class, his hunting methods more closely approach the instinctive style.

In 1959 Arlen, now 47, used his first paycheck to buy a Ben Pearson longbow. Actually, he had started shooting in 1957 with a longbow borrowed from his brother. Although he has since shot and hunted with both recurves and compounds, his first and lasting love is still for the longbow.

Nevertheless, it was 15 years before he scored on the first of ten deer he has taken, and that was with a 60-pound recurve. It wasn't until 1981 that he got interested in the compound bow, more



to prove he could master the newest contraption than any particular desire to shoot it. The experience did prove to him that he had much to learn about the sport of archery. He joined a local archery club and set his mind to shoot competitively. But he clung to the primitive methods of shooting and shot in the bare bow class. In 1983 he took his first state title, bare bow bowhunter, with the compound, and repeated the win the following year. In 1987, Arlen took his first state longbow title indoors, and the next year he was awarded two state first places with the longbow in both the field and hunter classes.

### **A Natural**

Hunting was a natural for Arlen Payne. He farms 80 acres in addition to his regular job as a maintenance employee, and his home is centered in good deer country. While his duties restrict his hunting time, the archery season is the most important part of his calendar.

Of the deer he has taken, three were





OF PAYNE'S DEER, three were taken with the longbow, one with the recurve, and six—including this fine buck—were dropped with his compound.

killed with the longbow, one with the recurve, and six were dropped by his compound.

Currently, the Columbia County resident shoots a 55-pound Ben Pearson longbow, utilizing tapered 29-inch shafts tipped by Zwickey four-blades. With his Darton 50-pound recurve, he shoots the same wood arrows and heads. For his 54-pound Pearson compound, Payne carries XX75, 2413, overlong aluminums. "Had to attach an arrow rest to

that bow," he grinned. "They weren't set up for instinctive shooting." He shoots both the longbow and the recurve instinctively, but with the compound, he uses the head of the arrow to rely on the gap system.

Arlie admits to only one "long" shot, a 35-yarder. The rest of his shooting has been within ten yards—as close as two. "The closer, the better." Although he enjoys shooting all of his bows, he has settled on the longbow as the mainstay of his hunting.

When questioned why he has retained the more primitive methods of shooting, his expression suggested he was not trying to be original with his answer.

"Well, it's the challenge."

Modesty wouldn't permit it, but he could have added, "It takes a real hunter to be successful." For, therein lies the true art of archery.

NOT LONG AGO, WCO Keith Snyder, who recently transferred to Dauphin County, presented a program to the Factoryville United Methodist pre-schoolers. Here the students take turns pulling their hands in the box and trying to guess what's inside. Teacher Marlene Quigley says the students learned a lot and enjoyed Keith's presentation very much.





Hunters have argued for decades over which type of rifle is best for deer. Is the verdict in? No, not now, tomorrow or the next day, but this could be a good time to look at . . .

# The Best Deer Rifle Action

By Don Lewis

Photos by Helen Lewis

**L**OOK, FRIEND, I've killed 22 deer with an old Model 14 Remington 35 slide action. There isn't a better deer rifle anywhere in the state," a tall gray haired hunter said emphatically. "It takes a slide action for quick shots in the brush."

"Yea, Dan Boone killed a bear with a flintlock, too, but that doesn't make the black powder burner the best bear rifle. You've never shot a deer farther than from home plate to the pitcher's mound, and not every deer hunter hunts in brush so thick there's only three hours of daylight. Spend a day on Grime's flat with your 1912 gun and see how you do. With my 300 Weatherby Magnum I've dropped three bucks at over 200 yards, each with just one shot. You see, a good deer hunter doesn't need a box of ammo to kill a deer. Nothing ever invented beats a bolt action, and you can engrave that on the side of your antique outfit."

No need to take this argument any further. There will never be any genuine agreement on which type of action is best for deer hunting. People have called me at midnight to settle such arguments—I seldom shed much light on the subject at that hour.

Let's step back in history and take a look at the evolution of the rifle. I'm not going back to the dark ages, I'll start when the shoulder firearm first came to America.

Spanish explorers carried the cumbersome harquebus, which apparently, was a fearsome monster. History reveals that even friendly Indians trembled when one was fired. When settlers moved farther up the coast of the main-



DEER HUNTERS have four basic types of rifle actions to choose from. Left to right, they are the single-shot, the lever action, a bolt action and a pump action. Determining which one is best, however, is up to each individual.

land, the lack of a reliable hunting weapon brought them close to starvation.

German immigrants brought the military Jaeger, which was another ungainly, large caliber rifle. It was difficult to load, and its accuracy was a hit and miss affair, and that is no pun. It was obvious that if the colonists were to settle the land, a better firearm for hunting and protection was needed. Right at this point the famous Pennsylvania long rifle

made its debut. (By the way, the Pennsylvania long rifle is often mistakenly called the Kentucky Rifle, but that's a story in itself.)

The big, cumbersome military outfits of that time didn't fit the needs of the frontiersman. He needed a lightweight, accurate rifle. The old smoothbore military rifles weren't as accurate as longbows or crossbows. To load most of those old outfits a shooter had to pound the ball down on the powder charge, which sent accuracy out the window.

When it was discovered that a ball smaller than bore diameter could be used, wrapped in a grease-soaked patch, the loading problem was solved and the flintlock's accuracy enhanced.

A few decades before the metallic cartridge hit the scene, the percussion cap gave the black powder rifle a reliable ignition system. But the percussion cap's longevity was short lived; the metallic, self-contained cartridge made its



appearance in Colt's 22 handgun just prior to the Civil War, ending the days of uncertain ignition.

The single shot rifle has to be considered the first type of rifle action. But around 1860, Christopher M. Spencer in Connecticut patented a workable seven-shot, lever action rifle. It held its shells in a tube magazine in the stock and the lever ejected the empty case and fed a fresh round into the chamber. It did not cock the hammer, though, and that was a drawback.

The Spencer was followed by the Henry rifle, which held 15 shells in a tubular magazine under the barrel. With one shell in the chamber, the Henry was known as a "16 shooter." The trigger guard served as the lever, and was quite efficient in loading and unloading. Misfires were commonplace in those days, so Henry designed his outfit such that the firing pin struck two places on the rim of the 44-caliber metallic cartridge. This improved ignition, and Henry was honored by having his initial "H" stamped on the head of each cartridge.

The Henry was not necessarily a better military rifle than the Spencer, of which over 100,000 were produced for the military, but after the war, the Henry became the Winchester, which gave Winchester a near monopoly on the firearms business.

The lever action continued to reap more accolades as Winchester Models 1866 and 1873 helped tame the West. Unfortunately, the lever action is not strong enough to handle more powerful cartridges. The lever action certainly



**THREE** well known and popular lever actions are, left to right, the Winchester Model 94, Marlin 336, and Savage 99. Each of these has been around, in one form or another, since the turn of the century.



had made a significant contribution to America, but a stronger action was needed, and the bolt action was soon to enter the shooting stage.

Around the time that the Spencer was sold, in 1869, Peter Paul Mauser of Oberndorf, Germany, put the final touches on a single shot bolt action design, the Model 71 Mauser. Shortly afterwards, he added a shell-holding tube to make a repeater version.

I might point out that the idea for placing a box-type magazine directly under the bolt belongs to James P. Lee. It's fair to say that his idea was an instant success. To show what I mean, by 1889, the box magazine was used around the world.

Ferdinand Ritter Von Mannlicher invented a device to hold the cartridges so they could be inserted into the magazine with just one motion, which was a boon to the military.

The bolt action was now on a par with the lever, but the lever was in no danger of being pushed over the brink. It would last through the years, obviously, but the strength and simplicity of the bolt action were soon to catch on. More importantly, the bolt action's real contribution was that its frame strength and locking system opened the door for the modern, centerfire high pressure cartridge. With these developments, the repeating rifle essentially had been perfected.

The famous pump or slide action made its appearance in John Browning's Model 1890 Winchester. It would be another 22 years before Remington would come out with their first successful big game slide action rifle, the Model 14. In 1936, Remington updated the Model 14 and renamed it the Model 141. It was chambered for a number of Remington cartridges, but the 35 Remington, which had actually appeared in 1908 in Remington's Model 8 semi-auto-

matic rifle, is the one that carries all the nostalgia of the hunters of pre-nuclear days.

Maybe the aged hunter in the beginning of this column was right when he said the slide action was the best for fast shooting in the brush. There were a few old tattered logging roads and some narrow pipe line openings in the 35's hey day, but the 200-foot wide power rights-of-way and the solid base forestry roads were still years in the future. Also, the deer herd was primarily in the northern tier counties, and that meant woods shooting, and the 35 Remington was definitely designed for that.

By today's standards, the 35's 200-grain round-nose slug, lumbering along at 2000 fps, is slow to say the least. Even the 158-grain bullet added a mere 200 fps. Compare the 35's velocity with the young fellow's 300 Weatherby Magnum, which can push a 180-grain slug out of the muzzle at 3200 fps and a 220-grain slug at 2800 fps, and you can see what I mean.

It's possible the slide action rifle



**TWO OF Don's favorite deer rifles are the Remington Model 700 Mountain Rifle chambered for the 280 and topped with a Simmons 3-10x scope, and Ruger's Model 77 308 Mannlicher with a Redfield 2-7x.**



REMINGTON'S fairly new Model Seven chambered for the 7mm-08 has attracted the attention of many Keystone State deer hunters. Note the Cellini Stabilizer on the muzzle, which reduces recoil and muzzle jump up to 50 percent.

These Marlin, Winchester and Savage outfits are somewhat similar in design, although the Savage has what is called "primary extraction," which allows the use of more powerful cartridges such as the 243, 300 Savage and 308 Winchester. Primary extraction breaks the fired cartridge loose from its seal in the chamber. For instance, in a bolt action, primary extraction takes place when the bolt handle is lifted and the locking lugs are turned out of their recesses in the receiver. This initial movement also forces the bolt backward a fraction of an inch and breaks the empty loose. The Model 94 and Marlin 336 designs do not include a primary extraction system, so they are restricted for use with lower power cartridges.

would have died ignominiously if Remington hadn't developed the Model 760 pump, which is truly a high-power big game rifle. With the 760's (now the Model Six) rotary locking system, cartridges such as the Remington 280, 30-06 and Winchester 270, which were too powerful for the Model 141, can be fired safely in the new Remington pumps. I might add here that the 760's clip makes it easy to safely unload and load. Is it popular? A 1985 GAME NEWS' survey indicated that the 760 pump was used by more than 17 percent of Pennsylvania deer hunters. The pump action is far from dead.

### Three Basic Designs

Today we have basically three lever action designs, and each dates back prior to World War I. I think it's accurate to state that Marlin's 336 (originally the Model 1893) was first, followed by Winchester's Model 1894 (known now as the Model 94) and Savage's Model 99, which appeared just before the turn of the century. The latest lever on the market is Browning's BLR, which uses a gear arrangement to move the bolt back and forth.

The term lever action is self explanatory; the rifle operates by what is called a "finger" lever under the action and pistol grip. Unloading and feeding a new round in the chamber is accomplished by working the lever down and back up. At the same time, the hammer is cocked.

Before I sink any deeper into hot water with the Winchester Model 94 and Marlin 336 fans, let me just say that those two models are alive and well. I don't have exact statistics, but it's possible there are around seven million Model 94s in use and more than five million Model 336s in the big game woods. As you can see, there is little danger of them passing into oblivion.

We refer to the Savage 99 as hammerless, but that's not quite correct. It doesn't have a visible hammer, but there is one inside its action just the same. The 94 and 336 models feature tubular magazines, but Savage employs a spool magazine—somewhat like a cylinder without outside walls. When the first cartridge is pushed down into the spool a second recess is exposed and so on. With each cartridge held in a separate recess, there's essentially no chance of the cartridges being damaged in the magazine. Also, the spool is numbered and the numbers are visible through a small hole on the side of the receiver. This tells the hunter how many cartridges are left in the magazine.

As I pointed out, the significant feature of the Browning BLR is the gear



arrangement on the bottom of the bolt. In the other lever actions, the lever works directly against the bolt, but the Browning's gear arrangement causes the bolt to move farther than the lever does. The gear arrangement is not unique, both Marlin and Mossberg used it some years back.

The BLR has a visible hammer, which cocks when the bolt is geared back. Like the Savage 99C, the Browning BLR has a detachable box magazine, but unlike the Savage 99C's magazine, which fit flush with the action, the BLR's extends out below the action and interferes with carrying the rifle with one hand. That's a drawback to me, but I have to admit, the BLR is a nice compact outfit, and chambered for the 243 or 308 cartridges, it makes an ideal deer rifle.

This short rundown on the various actions is meant to give the reader a little insight on how each type of action came into existence. For a long time bolt actions were offered in only right hand versions, which meant left hand shooters had little choice but to choose the lever or pump. However, the lever and pump outfits don't depend entirely on hunters who shoot from the left side; each action has a special appeal. Most lever and pump fans believe their favorites are faster than the bolt, and that might well be. In the early days of the pump and lever actions, shots were close and in brush. It's reasonable to assume that under those conditions, the target would be on the move. One elderly owner of a 35 Remington told me the first eight bucks he killed were under 50 yards and "on the jump in thick brush." I'll rest my case with that statement.

## THE SHOOTER'S CORNER

DON LEWIS



**THE SHOOTER'S CORNER**, by Don Lewis, is a 449-page hardcover book that covers nearly every facet of the shooting sports from a hunter's point of view. Beginning with the history of firearms, Don covers actions, stocks, and barrels; scopes and metallic sights; rimfire, big game and varmint rifles; shotguns, gauges and fit; and a whole lot more. Order from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797. Price is \$15 delivered.

I don't know when the first argument began over the best type of rifle action for deer, but I do know that it will never end as long as two deer hunters have the strength to argue. Use what is best for you. Half the fun in deer hunting is owning a rifle that has a special appeal to you.

## Thoughts While Walking

*Government is everywhere to a great extent controlled by powerful minorities, with an interest distinct from that of the mass of the people.*

—Goldsworthy Lowes Dickinson

# *In the wind*

bob mitchell



According to a Wyoming survey of 1000 resident and nonresident elk hunters, only 25 percent of the residents and 44 percent of the nonresidents considered themselves trophy hunters. Both groups favored managing some areas of the state for trophy elk but, the residents, anyway, were not interested if it meant closing some areas for a while or paying more for a trophy fee.

For the fifth consecutive year spring turkey hunters in Arkansas enjoyed a record harvest. Last spring 8283 gobblers were taken, a two percent increase over the previous year's harvest and an 84 percent increase over the five-year period.

**A female grizzly bear snared in northwest Montana in 1983 was found to be 28 years old, making her the oldest free-roaming grizzly on the continent. She was equipped with a radio transmitter at the time and her movements were monitored until this year when the transmitter fell off. Rather than trap her again, biologists decided to let the now 34-year-old bear live out the rest of her long life without any more intentional harassment.**

The Conservation Reserve Program became the largest long-term cropland retirement program in U.S. history, reports the National Association of Conservation Districts, when the 2,462,382 acres enrolled last February brought to 30,592,672 the total acres enrolled in the program. The previous most successful federal conservation program was the Soil Bank Program, which began in 1960 and had up to 28.7 million acres enrolled.

Lake Michigan is so polluted with polychlorinated biphenyls, DDT, dieldrin and chlordane, reports the National Wildlife Federation, that eating just one large lake trout in a lifetime puts a person in a cancer risk category considered unacceptable by the U.S. Environmental Protection Agency. As a result of their two-year study, the NWF recommends that women who intend to have children, pregnant women, nursing mothers, and children 15 years of age and younger should not eat any lake trout, brown trout, chinook salmon, coho salmon, walleye or yellow perch taken from the lake. The NWF's study of health effects from eating Lake Michigan fish is the most comprehensive ever conducted, and among the conservation organization's recommendations is that similar studies be conducted in other major bodies of water where toxic chemicals are being dumped.

**Last year, according to the U.S. Fish and Wildlife Service, 15,918,522 hunting licenses were purchased—an increase of about 100,000 over the previous year's sales—amounting to \$380,747,727.**

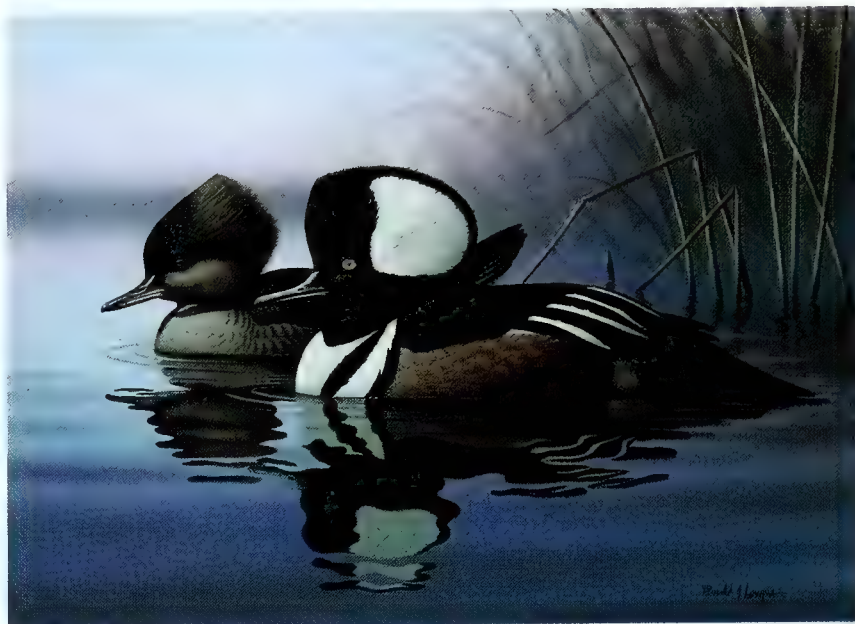
Nonresident hunting license fees in Missouri will go up in 1990. A spring turkey hunting license will go from \$55 to \$75, for example, and a firearms deer hunting license will go from \$75 to \$100. For years the Missouri Department of Conservation has received the revenue from a 1/8 percent state sales tax, which fluctuates with inflation, and used the funds for many new programs. The license increases were enacted to maintain the Department's basic, more traditional programs.

## ANSWERS:

1. habitat
2. white
3. doe hunting
4. ten
5. open field
6. forty
7. vision
8. binoculars
9. head
10. sixteen

Hunters should be: COURTEOUS, TRUSTWORTHY, and SAFE





## **Voluntary Waterfowl Stamp No. 7**

Pennsylvania's 1989 waterfowl management stamp, a pair of hooded mergansers by Orange, Virginia, artist Ronald Louque is the seventh "duck" stamp offered by the Game Commission. Funds derived from stamp and print sales are used for wetland acquisition, habitat development, and waterfowl-related education programs. Stamps cost \$5.50 each, \$22 for a plate block of four, and \$55 for a full sheet of ten, delivered. For a savings, the cost for five or more ten-stamp sheets, in any combination of years, is \$40 per sheet. The 1987 stamps will be available through December 31, 1989, at which time all remaining supplies will be destroyed.

Stamps are available at the Game Commission Harrisburg headquarters, region offices, Pymatuning and Middle Creek Wildlife Management areas, and at participating hunting license issuing agents and stamp dealers. Signed and numbered fine art prints of this design are available from art dealers and galleries nationwide.



*Last Glance*, by Jack Paluh, is the seventh limited edition fine art print available through the Game Commission's Working Together for Wildlife program. As with previous editions, *Last Glance* is limited to 600 signed and numbered prints. Image size is approximately 15 x 22½ inches, printed on acid-free 100 percent rag paper. Price is \$125, delivered; framed prints are an additional \$97.50. Limited numbers of 1986, 1987 and 1988 prints are still available. Order from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797.



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# PENNSYLVANIA GAME NEWS

DECEMBER 1980

FIVE DOLLAR



*John P. French*  
80





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## The Hit Parade

I GOT SOMETHING interesting the other day, a 12-page computer printout listing the agency's laws and regulations, along with the number of violations settled for each offense in 1988.

A total of 211 regulations were listed numerically by section number, beginning with 0135.102.A.1 (hunting on a controlled goose or duck hunting area) and ending with 2964.C.1 (keeping wild bird or animal for exhibition without permit). There was one violation for each of those offenses. There were 7389 violations in all. Being the kind of person I am, I immediately made a list of the top ten laws or regulations most often violated.

Coming in at the number one spot was "spotlighting after hours" (after 11 p.m., or at any time during the regular antlered and antlerless deer seasons). Of the 7389 violations, 949 (12.8 percent) were for that offense.

Number two, at 447 violations (6.0 percent), was "having a loaded firearm in a vehicle not in motion." A little further down in rank, at the number seven position, was "having a loaded firearm in a vehicle in motion and/or casting the rays of lights on wildlife while possessing a firearm." For this rule, 311 violations (4.2 percent) were issued.

So far then, 1707 (23.0 percent) of all the violations, were issued to people for having loaded firearms in their vehicles and/or for illegally shining lights on wildlife. Sure, there are no doubt some exceptions, but it doesn't take a Harvard Law School graduate to figure out what the vast majority of these folks were up to.

There was essentially a tie for the number three position. "Failure to properly tag big game" (410; 5.5 percent) was closely followed by "unlawfully taking, possessing or transporting wildlife" (403; 5.5 percent). I suspect that in most instances, the only difference between the former and the latter was whether or not the violator made it out of the woods before getting nabbed with an untagged big game animal.

The next two, numbers five and six, fit nicely together, too, because they show utter disrespect for the land. Violations for littering—in one form or another—and operating a motor vehicle on land, comprised, respectively, 386 and 382 of all violations last year, or 5.2 percent each.

Number seven was mentioned previously. In at number eight was "failure to wear fluorescent orange." In 1988, 296 big game hunters blatantly demonstrated that they had no concern for their personal safety or the peace of mind of other hunters afield.

Number nine, comprising 175 (2.4 percent), was violations for "hunting in a Safety Zone." At number ten was "alighting from a vehicle and shooting within 25 yards of a public highway." This offense accounted for 135 (1.8 percent).

Like all laws today, the Game and Wildlife Code and attendant regulations is fairly lengthy and complex. It must be to cover the countless situations that can occur when it comes to protecting a valuable resource—wildlife—and regulating two very popular sports—hunting and trapping.

Yet, despite the complexities, this breakdown shows just where our law enforcement officers are concentrating their efforts. Of the 7389 violations recorded last year, 3894 (52.6 percent) were for these ten fundamental laws. Protecting wildlife from poachers, the land and landowners from abuse, and the safety and image of legitimate sportsmen are where their priorities are, and they're obviously doing a fine job. —*Bob Mitchell*.





Nicholas Rosato

**BY MID-MORNING C.W. had his buck, a nice 6-pointer. We dragged the dressed deer out to the road and headed for camp. After hanging the deer from the meat pole, it was back to the woods.**

## *The Ducky Deer Hunt*

**By L. W. Loveland**

**I** SUPPOSE this story can now be told. It happened almost 25 years ago, and most of the principals (no pun intended) have long since left the area. It's now safe, I think, to reveal all the details.

Not every hunter feels cheated if no game is brought home at the end of the day. Sometimes opportunities are simply passed up, just so there's an excuse to go back out again. Or, at other times, obligations involved in bringing the game to bag and to larder may exceed the desire to have it. This is such a tale.

It seems that 25 years ago, on occasion, nonresidents could "luck out" and obtain a Bradford County antlerless deer license. At least I got one that year. I live in the Southern Tier of New York, but own a small lake property in Bradford County, which we use as a deer and turkey hunting camp. Sometimes it was just my buddy Ol' C.W. and myself. At

other times we might have as many as seven in camp.

At that time, in my hometown, we had a brand new high school, complete with a brand-new principal, brand-new curriculum coordinator, a brand-new Assistant Superintendent for Business, and a brand-new high school faculty. Also, a brand-new swimming pool. I was the brand-new liaison between the P.T.A. (prattle, tattle and annoy) and the Board of Education. Interfacing with these modern, highly motivated educators was a fine experience. And because of their active minds, some very witty ideas and exchanges occurred.

But more of that later. Back to the hunt. C.W. and I had done our pre-season scouting well. We knew where a couple of bucks were hanging out. We moved into deer camp on the day before the season opened and got the fire going



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good in the wood stove, got the water in out of the lake, got the neighbor's privy opened up for business. And then settled down to start the activities.

Monday morning saw us up and at 'em real early. After a hearty breakfast we were off to the woods. Watching on our favorite stands for a couple of hours were not productive, even though it sounded like World War III had started. Nobody pushed anything past us, though, so we started to prowl. By mid-morning, C.W. had his buck, a nice 6-pointer. We dragged the dressed deer out to the road and headed for camp. After hanging the deer from the meat pole, it was back to the woods. We got no more action the rest of the day, but with "meat on the pole" the cabin was cheery that night.

We went deerless on Tuesday and Wednesday, but it was great to be out in the woods. We both went back to our jobs on Thursday, C.W. to his engineering firm and me to my dental practice. Saturday found us back in the woods, but once again no bucks. I didn't feel too

bad, though, because I had the antlerless season permit. The final Saturday was the same — no deer. From that point I realized I would be on my own on the following Monday as C.W. could not take the day off. Solitude can be great, but I personally feel a hunt is always better when there's someone to share it with.

Now, let me digress for a moment. On the Thursday night of the first week of deer season we had a school board meeting. At the meeting, Dr. R.D., the Assistant Superintendent for Business, and J.W., the Curriculum Coordinator, approached me with an idea. What if, they asked, someone were to put a duck in the high school swimming pool? Wouldn't that be funny? I quacked my agreement, and thus became a co-conspirator — and I knew where to get the duck.

So the plans were set. I would get the duck, we would keep it for a few days, and then on the last night of school before Christmas break, put it in the pool.

Accordingly, I bought a duck on the last Saturday of buck season. A farmer near my camp agreed to sell me one and I had a dog crate along to transport it.

Back to hunting. Monday, the first day of antlerless season, dawned cold, blowing and rainy. Little icicles dripped from the trees. C.W. and I had seen a large herd of doe hanging around a wooded slope about a mile from the cottage, so it was there that I headed. There were plenty of signs. The floor of the woods was well marked with leafy disturbances. The "girls" had been around, rooting and trampling. But on this cold gray morning, they might just as well have been in the next county, at least for visibility's sake. I saw nothing.

Taking a break from my slow patrol, I sat on a stump. As water dripped down my back I began to think about this whole business of deer hunting. I had gotten a buck in New York and C.W. got one in Pennsylvania. We had shared the meat and our freezers were full. If I got a doe here, I realized, I would have to drag the soggy beast off the mountain, load it in the wagon, skin it, get it cut up,



**ABOUT 5:30** the next morning, a pool representative came to check the filter operation. He opened the door, flipped on the lights, and there in the 75-degree water swam our duck, happily quacking his morning greetings.

and then give most of it away. Why, I asked. Why not let the animal have another season? The drops of rain gave me my answer. I headed for the road.

On my way home I stopped by camp to pick up the duck. Leaving it at the home of the "Business" guy, we made plans for "our night." R.D. was appointed to make the actual move, as he had master keys to all of the buildings in the school district. What we did not plan on was the need for some repairs to the pool's filter system.

Workmen for the pool company toiled throughout the day on that next to the last school day. And on into the night. They finally finished about midnight. R.D. kept an eye on the operation, and shortly after the workmen left, he introduced our feathery friend to the pool.

About 5:30 the next morning, a pool company representative came to check the filter operation. He opened the door, flipped on the lights, and there in the 75-degree water swam our duck, happily quacking his morning greetings. The principal, C.M., was called immediately. A resourceful man, he came with a length of stout string. The duck was easily captured and became the day's star attraction. He was a featured guest at our assembly program. He was photographed for the evening paper. The wire services picked up on it, and he made news all over the country—quite a bit of fame for a little old Warren Township duck.

R.D., J.W. and I came under immediate suspicion, but proof was lacking. We thought we had covered our tracks pretty well. A lot of folks called in, claiming the duck must be their "missing" creature. Hearing this, I assured the school authorities—denying any complicity of course—that the duck was nobody's lost pet. Eventually the duck's



notoriety subsided, and the District Superintendent ate him for Christmas dinner. The whole prank was over, we thought.

Years later, when C.M. was elevated to Assistant District Superintendent, we found out different. It seems that we were the victims of a "fowl" practice initiated by C.M. Seems that he received a report every morning, from the Sheriff's Department, of the names of all owners of cars observed in the high school parking lot after midnight. Turns out, a routine patrol had recorded the special vanity plate license number on R.D.'s car, checked it out, and included it in his morning report. We still would have been home free, though, except for one teenage girl. When she had spotted the duck she said, "That looks like the duck that has been in our garage for two days." Upon some questioning by C.M., it turned out that the girl's mother was R.D.'s secretary. So part of the truth had been known all along.

Now, one might ask, what has all this got to do with hunting. The moral of the story is that when the weather in the deer woods turns foul, don't start thinking of fowl. And don't be disappointed if you bring home neither fur nor feathers. There's more to hunting than "meat on the pole." And maybe there's a laugh or two to be found.





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SOPCHICK



# Welcome to Pennsylvania

By Timothy Wolfe

IT WAS STILL dark as Gary yielded the old pickup onto the interstate. As I carefully poured some coffee from my thermos into a travel mug, my thoughts were filled with the anticipation and excitement that precede every Pennsylvania buck season. Opening day was still four days away, but after months of planning and talking about it, my partner and I were finally starting the 8½-hour-drive from North Carolina to Beaver County.

Since moving to Charlotte several years ago, I've often bragged to Tar Heel sportsmen about Pennsylvania hunting. One of those was Gary Fayne, who is about as serious a deer hunter as they come. He has taken several respectable whitetails with both gun and bow, but the native Carolinian had never hunted above the Mason Dixon line. With just a little coaxing from me, though, he accepted my invitation and was joining me for the first three days of the 1988 season in the Keystone State.

The lengthy drive didn't seem to take quite as long as we talked of deer, deer hunting, and other such topics that often make up the conversation between two men on their way to hunt whitetails. I explained to Gary that we probably wouldn't see as many deer in Beaver County as we would, for instance, hunting in the mountain areas of northern Pennsylvania. I explained, though, that the herd around home consists mostly of big farm land deer, and that chances of bagging a nice buck were good.

We arrived Friday evening in time to find my dad sighting in his 243 at the homemade range behind the house. "Haven't seen many deer while spotlighting" he said. "There's been a lot of guys spotting lately, though, and I think the deer are a bit light-shy." Needless to say, those were not the encouraging words we had hoped to hear.

After introducing my friend to the rest of the family and to some of Mom's "Yankee-style" cooking, we set out to do a little deer spotting. We were joined by my brothers-in-law Roger and Rick. They would also be hunting in the same general area as my dad, Gary, and I. We were a bit disappointed to find only three pairs of eyes after several hours of spotting. "Who told you there were any deer in Pennsylvania?" Rick jokingly asked Gary. I assured him the deer were there—somewhere. I hoped I was right.

Saturday morning Dad and I presented Gary with a look at some of the finest upland bird hunting, in our opinion, anywhere. Gary had never seen, let alone hunted, ruffed grouse before and he was somewhat confused by their thunderous explosions from cover. Though he failed to get off a shot at any birds that day, he was fortunate to see a Pennsylvania red fox trot out of some grapevines. He said he had watched the fox for a good minute as it nonchalantly made its way up and over a ridge. The opportunity to see a fox in the wild is always one of nature's treats—no matter what part of the country you're from.

## "Cherry Hill"

Later that afternoon we walked up to the area where we would be hunting on opening day, known locally as "Cherry Hill." An old tractor lane ran along the top of a ridge and followed it out for a mile or so, to where it opened up into large rolling fields.

It was on this very lane that I had missed a chance at a nice buck on opening day of the previous year. It was near quitting time, and after hunting all day and not seeing so much as the rump of a deer, I was casually walking down the lane, carrying the rifle to my side. Suddenly I was overcome by the odd sensation that I was being watched. I stopped, and when slowly turning my

head to the left, came face to face with a beautiful big buck, not 30 feet away. He seemed to stare completely through me as I cautiously raised my gun. Just a couple more seconds, I remember hopping, just one more sec . . . Well, the rest happened so fast that all I can recall is that the buck was no longer around by the time I got my gun up. I could think of nothing else but that deer's eyes staring at me while I sat through the flight back to Charlotte the next day.

I directed Gary to a wooded hollow off to one side of the ridge, a place Dad had said, "would be as good a spot as any." I helped him find a suitable tree and showed him where deer were likely to be seen. Gary looked around and then nodded in agreement. As for my-

self, I had known all year where I wanted to be when daylight broke on opening day. I would be watching the large crab apple thicket on the opposite side of the lane from Gary's stand. After blowing my chance at the buck the year before I trailed him into this thicket. I remember being amazed at the amount of deer sign, especially the thigh-size rubs. This year I would stand where I could see some of the crab apples and part of the ridge. I figured that when pressured, deer would head for the safety of this cover, and that I would be waiting.

We awoke Monday morning at 5 o'clock. Opening day had finally arrived! After joining Dad for some coffee and a light breakfast, Gary and I headed up the road to Cherry Hill. I wished Gary luck as we parted company and headed our separate ways. I continued down the lane 185 paces and came to the log which showed me where to drop off the ridge to find mine. I had no sooner got settled when five deer came crashing right by me, heading for the crab apples. It was too dark to make out anything resembling antlers, but it was a great way to begin the season. A peaceful feeling of contentment then came over me as I stood there on my stand in the early morning quiet of my favorite woods.

Daylight was just beginning to creep into the hollow when the stillness of the woods was broken by something disturbing the forest floor out in front of me. I clutched my rifle and focused my eyes in the direction of the sounds. But when an overgrown gray squirrel finally confessed to be the culprit making all the noise I relaxed. The squirrel scampered from the base of one tree to another, sounding as big as a bull moose as it dug around in the dry leaves. Soon another movement got my attention and I quickly made out the head of a doe near the edge of the thicket. I studied her long enough to convince myself she wasn't going to suddenly grow antlers.

By this time the squirrel had made its way to the tree next to the one I was by and was getting uncomfortably close.



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Before I knew it, he was on a limb not four feet from my head and looked as though he was calculating his next leap—right onto me. Visions ran through my head of the squirrel landing on top of me, each of us scaring the other one to death.

It was while I was bemoaning the squirrel that I caught the movement of a deer out of the corner of my eye. It was a buck, sneaking along the ridge out of the crab apple thicket. I pulled up, settled the crosshairs on his shoulder, then waited until he walked into a clearing. The boom of my 30-06 shook the squirrel out of the tree and into the next county. I could tell immediately the buck was hit by the way it slouched and dropped its tail. I worked another shell in the chamber and hit him again as he continued walking to my right. The deer jumped and I then lost sight of him.

I found the buck lying dead ten feet from where I had shot him the second time—a clean kill. Both bullets had found their mark and entered the vital area two inches apart. Unfortunately, one side of the buck's 4-point rack had been broken off about an inch from its base. Otherwise, he was a big healthy whitetail, my first buck since moving from home. I wasn't complaining. I looked at my watch and wrote down 7:35 a.m. as the time of kill on the non-resident tag.

As I was filling out the rest of the tag I heard three shots from down in the hollow on the other side of the lane. That must be Gary, I said to myself. After field-dressing my buck I walked down to where Gary's stand was. I could see the stand, but Gary wasn't around. Yep, he's got one down, I thought.

I dragged my deer out to the end of the lane and to the pickup, then rewarded myself with a cup of hot coffee. It had begun to snow when my dad's neighbor, Jim, pulled in behind the

truck with a bragging-size 8-point strapped to the hood of his car. We had known Jim and his son were going to be hunting in the area, though we weren't exactly sure where. Jim told me it was he who had fired the three shots, as he was also hunting somewhere down in the same large hollow as Gary. If Gary wasn't in his stand, and it wasn't he I had heard shooting, then where the heck was he?

### Back On Stand

Later that morning, after taking my deer down to the house, I walked up through the hollow to try and locate Gary. This time I found him back on stand. He came down and congratulated me, then explained what had happened. Apparently he had noticed Jim's light down in the hollow on the way into his stand that morning, so Gary crossed over to hunt the adjacent ridge. Around 7:30 a big 8-point following the lead of four does ran down the hillside next to him. When Gary finally had the buck in the scope, the deer had bounded over the ridge and into the hollow where Jim was. Just a few seconds later Gary heard Jim shoot three times. Gary went on to tell me that not long afterwards, two deer ran into the bottom of the valley behind him. "I could see antlers on one of 'em" he said, "but I couldn't make a clear shot because they were behind some grapevines." He fired once at the



HE SAID he had watched the fox for a good minute as it nonchalantly made its way up and over the ridge. The opportunity to see a fox in the wild is always one of nature's treats—no matter what part of the country you're from.



**AROUND 7:30 a big 8-point following the lead of four does ran down the hillside next to him. When Gary finally had the buck in the scope, the deer had bounded over the ridge.**

buck, but was sure he had missed it. He last caught a glimpse of the deer as it vaulted up and over the hill. I was pleased to hear that my friend was at least seeing some action on his first day of Pennsylvania deer hunting.

I left Gary and headed off in the general direction I thought Dad would be sitting. I figured if nothing else, I could possibly push some deer his way. I eventually found him, and as he hadn't seen a deer all morning, we decided that I would do some driving for him until quitting time. Later that afternoon, as Dad and I were discussing our next plan of attack, Jim's son walked up to us, grinning from ear to ear. "I just killed a 4-point out at the end of the lane," he said. So far that accounted for three bucks taken on Cherry Hill that opening day.

When Dad and I arrived at the house that evening, we were both surprised to find another buck hanging in the garage next to mine. Rick came out in his slippers and claimed the pretty 6-point. Congratulations were certainly in order, as it was Rick's first deer. He killed the

buck up on the hillside behind Dad's house, which is about three-quarters of a mile from where the rest of us were hunting. The bizarre circumstances and the tale he had to tell of how he bagged his first trophy deserves the treatment of another story altogether.

That night after supper we reflected on the day's events and talked over our plans for the following morning. Gary said he would continue to hunt from his original stand, and that he would be in it before daylight. I decided that I would sleep in until 8 o'clock, and then start walking through the woods, hoping to move some deer towards Gary.

A picturesque morning awaited me when I awoke the next day. It had snowed during the night, just enough for a light dusting to blanket the ground and trees. As I leisurely made my way through the woods, I paused long enough to take photographs of several impressive buck rubs. It was nearing 10 o'clock by the time I entered into the base of Gary's hollow. With my binoculars I was able to see his stand from several hundred feet away. Once again,



it was empty and Gary wasn't around. Now, where could that boy be this time, I wondered. I kept walking and eventually came out to the entrance of the old lane where I knew his truck would be parked. My heart began to race when I realized the pickup was gone. Only two reasons would have caused Gary to leave the woods; either he had started missing his wife in North Carolina so bad he had gone back to the house to call her, or, he had tagged a deer.

As I walked down the main road that led to Dad's driveway, I could see Gary and the truck parked near the garage. I hollered and he waved back, giving me the thumbs-up sign. Gary told me he shot a buck from his stand at around 8:30 in the morning. My friend was all smiles as we admired the 5-point rack, and he went on to tell me all the details of how he had taken his first "northern" whitetail. I think I was more excited for him than I was for getting a buck myself. "Welcome to Pennsylvania," I said.

Dad and the rest of the family were just as happy for Gary, and before long Jim and his son arrived to congratulate him. Gary's deer made it four bucks

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taken from Cherry Hill. By adding Rick's 6-point, that brought the total to five bucks killed within three quarters of a mile from Dad's house. I can't remember a better season.

When we started the drive back to Dixie the following morning, I said a silent prayer of thanks as we left my beloved home state. I had introduced a fellow hunter to some of the best white-tail deer hunting in the country, and I couldn't be more pleased with the results. Though not trophies by most standards, to Gary and me our deer were considered as such. We had only three days to hunt in Penn's Woods and we both had left with whitetails.

We hadn't been on the highway an hour when Gary looked over at me and asked, "Y'all ready to make plans for next year?" I was and we have . . .

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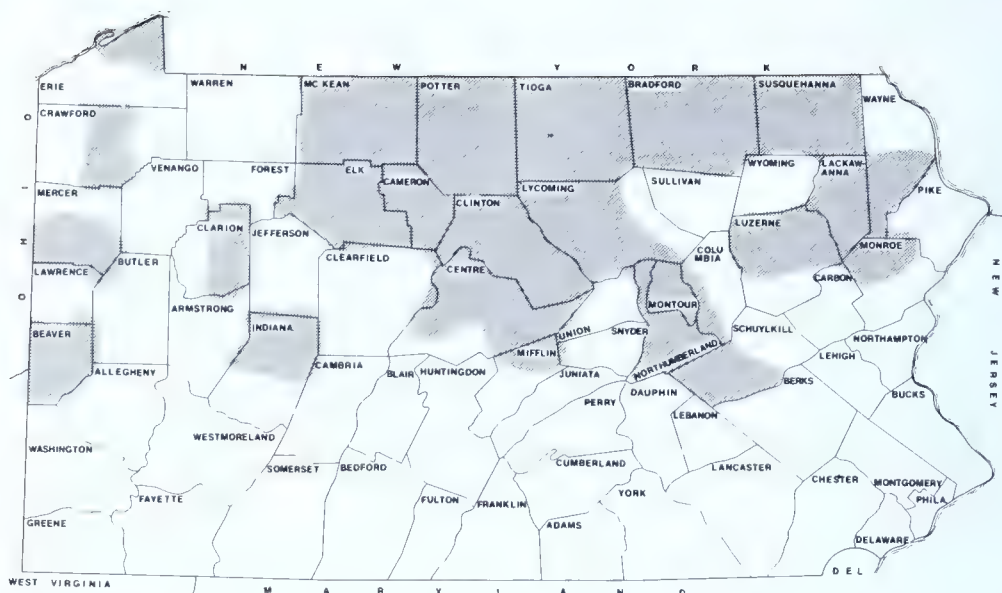


Figure 1. Range of the Eastern Coyote in Pennsylvania, 1974 - 1975

# The Eastern Coyote Revisited

By Arnold H. Hayden  
PGC Wildlife Biologist

**R**OAMING throughout Pennsylvania, the eastern coyote now calls this land home. What kind of animal is it? Where did our coyotes come from? What is their future here?

The eastern coyote looks like a medium-size dog. Adult males in Pennsylvania average 36 pounds, but some reach 55. Adult females average about 32 pounds, but may weigh up to 40 pounds. The coyote has a pointed muzzle, large erect ears, narrow chest, slender legs, and a large black-tipped bushy tail. Predominate pelage colors are dark brown, brown, gray and blonde. In the Pocono region a few coyotes are black and some a blonde-red color. A typical eastern coyote is an overall grayish-brown, with tan legs, rufous ears and flanks, and grizzled-gray frontal areas. A black stripe, often well defined, runs down the front of the lower half of each foreleg (McGinnis 1979). Canine teeth

are long and more slender than those of a dog. The eyes are usually yellow or greenish yellow. Their footprints are similar to those of a medium-size dog and oval in shape. Usually, only the two middle toenails will show in the print, and they will be slightly turned inward. In contrast, a domestic dog's prints are round, and all the toenails in a track will be obvious and pointing straight ahead or outward.

The Pennsylvania coyote is very similar to those found in New York and New England. There is some evidence of coyote-dog crosses, and the term "coydog" was coined to describe these hybrids. There also is evidence of coyote-wolf crosses in southern Ontario. This mix of genes has resulted in an eastern coyote that is larger than its western cousin.

The eastern coyote gene mixes have resulted in some behavioral and biologi-



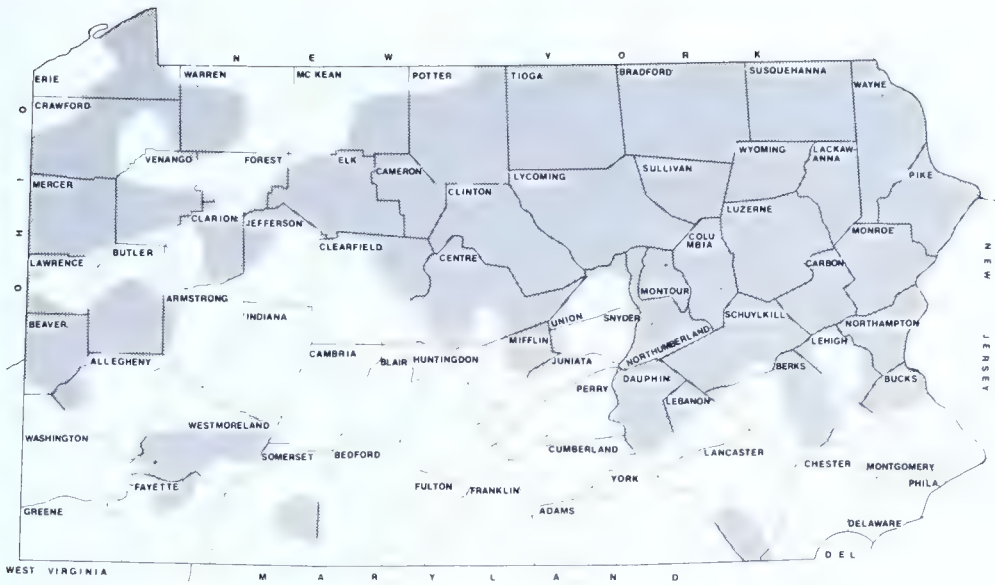


Figure 2. Range of the Eastern Coyote in Pennsylvania, 1982 - 1983

cal differences from that of the western coyote. Most western coyotes mature and breed their first year. Eastern coyotes, on the other hand, normally don't breed until their second year; but there are a very few animals that do breed their first. The eastern coyote establishes a well defined home range. Only the dominant male and female in a home range do the breeding, which is similar to the behavior of wolves. Eastern coyotes without home ranges are rather transient and usually do not breed. If a dominant male or female is killed within an established home range, the missing animal is replaced by one of these transient coyotes.

Breeding takes place in late January to mid-February. After 61 to 66 days of gestation, the young are born in mid-April to mid-May. The average litter size in Pennsylvania is 5 to 6 pups. They are born in an enlarged groundhog hole, fox den or secluded rock den. An expectant mother selects several den sites for use, and may frequently move her litter to escape detection. The male does most of the hunting for food when the litter is young, but as the litter grows, he is joined by the female in order to furnish enough food to the weaned pups. By late August, the family unit is traveling

and hunting over a 30-square-mile area.

Young coyotes begin dispersing during the late fall. Some may remain in the parent's home range for awhile; others move considerable distances. A yearling coyote in New York, for example, moved 120 miles. A dispersal of 25 to 50 miles would be considered normal.

The eastern coyote began appearing in northern New York in the 1920s (Severinghaus, 1971), New Hampshire and Maine in the 1930s, and Vermont in the 1940s. Coyotes became firmly established in Massachusetts in 1957. Coyote populations expanded rapidly in New York and New England during the 1950s, '60s and '70s. By 1982 the coyote harvest in New York and Maine exceeded 1500. In southern New England, the take went over 50 in just Connecticut.

The literature shows that since the wolf disappeared from Pennsylvania during the early 1900s, a few coyote-like canids have roamed the state. Records show that a small pocket of coyotes would appear for a few years in one part or another of the state, and then unexplainably disappear. By the late 1930s a small but persistent population became established in northern Pennsylvania (McGinnis and George, 1981). The first

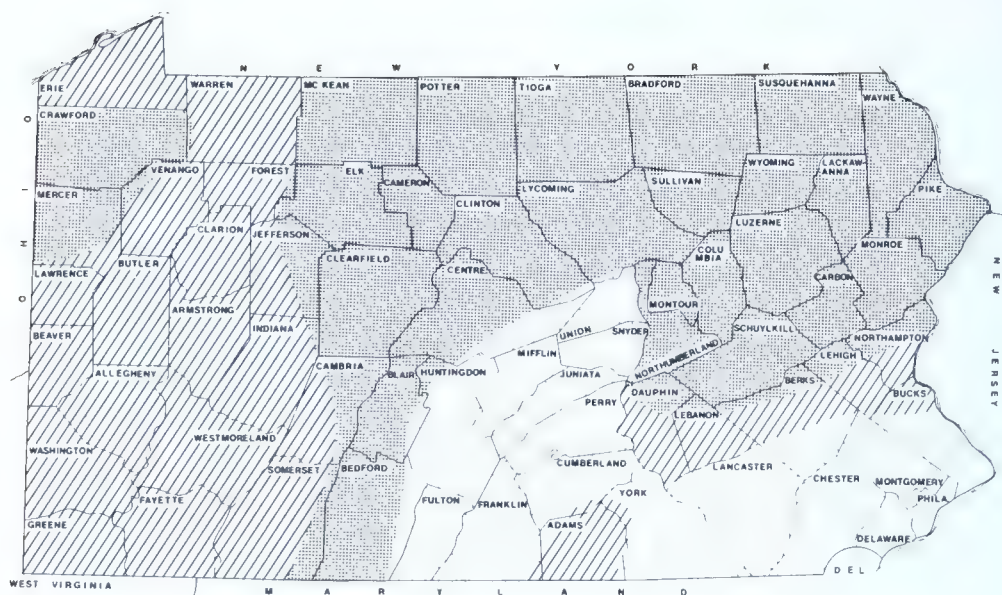


Figure 3. Range of the Eastern Coyote in Pennsylvania, 1988



**COYOTES** are now found throughout the state, with a population estimated at 3000 to 4000 animals. Under the Game and Wildlife Code, coyotes may be trapped in season (Nov. 2, 1989–Feb. 24, 1990) or hunted, with either a furtaker or hunting license.

confirmed killing of a coyote occurred in Clearfield County in 1946 (McGinnis, 1979).

A 1974 survey of wildlife conservation officers by Helen McGinnis, Pennsylvania State University, indicated a population of about 100 adult coyotes in Pennsylvania, with an annual harvest of less than 15. A range map showed most of the coyotes living in northeastern and northcentral Pennsylvania (Figure 1). It appeared coyotes from New York were dispersing southwest into the commonwealth. A small separate coyote population was established in Beaver County. There also was some evidence indicating coyotes were coming here from Ohio. All this information caused researchers to question the ancestry of our coyotes.

A follow up survey conducted in 1983 showed the range of coyotes in the state had doubled since 1974, covering about 20,000 square miles (Figure 2). There were indications that new populations were beginning to appear in the southwestern part of the state and in southern

Lancaster County. The 1983 survey indicated the coyote population had increased to 1500 to 2000 animals. The annual harvest had risen from 15 in 1974 to over 200 in 1982.

A third survey was conducted in the fall of 1988 to update the coyote population status. We learned that the coyote is now found throughout the state, with a population estimated at 3000 to 4000 animals (Figure 3). The annual harvest has increased to 500 coyotes a year. Coyotes have been seen within, among other places, the city limits of Harrisburg, Erie and Pittsburgh.

The coyote represents many things to different people. Many Indian tribes in the West believed the coyote was the creator of man and the bringer of good fortune. Other tribes believed that when good men die their spirits go to good places; when bad men died their spirits go back into coyotes. As a result of such religious beliefs, most Indians respected the coyote and did not kill it.

Today the coyote is viewed in a different light. Many people, especially in the



West, think of coyotes only as livestock killers and that they should be eradicated. To them, the only good coyote is a dead coyote. Intensive coyote poison control programs have been implemented in many Western states to reduce livestock damage. Most have been unsuccessful. In one state, for example, the only result was that coyote litters increased from 5 to 12 pups to compensate for the high mortality. Needless to say, the coyote continues to exist in about the same numbers as 40 years ago. Many eradication programs have since been abandoned because of their ineffectiveness and, instead, damage is controlled by removing only the problem animals.

In Pennsylvania some coyotes cause trouble, particularly with the sheep industry. The 1988 survey showed an average of 12 livestock complaints a year, most dealing with sheep losses. Of the livestock losses, 78 percent occurred in the sheep industry and about 75 sheep were killed by coyotes in 1988. Of the remaining livestock losses, 14 percent were chickens, and the remainder were a few ducks, geese and a goat.

Livestock complaints were scattered throughout the state, however, sheep losses are often concentrated as a result of one or two coyotes picking on the same wool grower. Most sheep losses occur in the spring, during the lambing period. In many cases these problem-causing coyotes have been in contact with man before and have, as a result, become extremely wary and secretive. Removal of these individuals is often difficult and time consuming, but such a direct approach is the only effective way of remedying the problem.

The status of the coyote in the United States has taken on new meaning in recent years. While they were once considered nuisance animals, coyotes today are important recreational resource for hunters, trappers and wildlife observers. In fact, the coyote is now the fourth most important furbearer in North America's fur trade.

A small but growing number of coyote hunters in Pennsylvania are slowly

developing hunting techniques for this elusive species. Deer hunters report hearing coyotes howling during the pre-dawn and sometimes shooting one while on a deer watch. Those coyotes are usually not sold but end up in the hands of taxidermists for mounting or are made into tanned pelts for homes and camps.

Ten years ago coyotes were caught incidentally in fox traps. Now a new breed of trapper is attempting to perfect techniques to capture this wary species. Once a coyote has experience in man's attempt to capture him, he shows he has learned from the experience and is rarely captured again. He seems to take great delight in demonstrating his disdain for a trapper. He digs out traps, buries them, or even turns them upside down without springing them.

What value can be placed upon seeing or hearing the cry of a wild coyote when hunting, fishing, hiking, camping or driving around? My phone rings daily from outdoor writers asking for coyote information. Sportmen and non-sportmen alike call after hearing coyotes yipping during the summer months. Farmers frequently comment about watching coyotes "mousing" in their pastures and fields or standing guard over a woodchuck hole. Drivers and passengers see for a fleeting second a ghost-like coyote crossing the road.

The eastern coyote in Pennsylvania has created a tremendous amount of interest. Because of his cunning and wariness, the coyote is here to stay and man must learn to accept him and live with his presence. Yes, the eastern coyote does stir the imagination and remind us of the untamed wilderness.

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# The Gun

By Sam Rob

**T**HE GUN was a Savage Super Sporter 30-06 bolt action. He bought it new, two days before the 1928 deer season, at the hardware store in Knox. It cost \$30. He didn't shoot a deer that year, but his brother, Louie, scored with it on a big doe.

It was near the end of the first week of the 1929 season and he had yet to get a shot. He rode through the dark in his brother's Model T Ford to the Milo pumping station, across the river from Clarion. Louie would use an 8mm French colonial rifle that day. He would use the gun.

## 50 Yards Away

The day was warm and sunny with no snow. He and Louie had separated at the car and he spent the morning walking and watching. He saw no deer until just after noon when he spotted one approximately 50 yards away, walking towards him. Despite the trees and brush its antlers were clearly visible.

He raised the gun, held the open sight on the buck's shoulder, and shot. The deer went down. He hurried through the brush to the spot, but found only blood—lots of it. Not expecting the deer to go far, he immediately began to follow the blood trail. After about 100 yards, he came to a state game preserve, and 35 yards inside the boundary was the buck, down but still alive.

He walked 400 yards or so back to his brother's car and then drove to Shippenville to the office of Deputy Game Protector Raul Snyder. After explaining what had happened, the two of them returned to the game preserve. The buck was still there. Snyder borrowed the gun and finished the deer with one shot in the neck. The first shot had broken the shoulder.

The buck weighed 172 pounds, field-dressed. It had nine points and a 21-

inch spread. He had the head mounted at Aaron's Taxidermy in Corsica for \$30. His buck would have won the taxidermist's contest for the most perfect 8-point except for a small, fifth point on the right antler. He was 22 years old at the time and it was his first deer. He shot 13 more bucks and one doe with the gun before he quit hunting in 1951. That first buck was the best he ever shot.

Twenty-one years later, the gun was back in action. Its stock had been refinished by one of his boys, though several of the deepest scratches and marks remained. The bluing was worn off in a couple of places on the barrel, and the front lens of the 2½x Weaver scope, added to the gun in 1939, had a slight chip in it. It still shot hard and true, though.

The youngest boy shot a 5-pointer with the gun that year. The following year, his middle boy took an 8-point with the gun on the opening day. Two days later the oldest boy used the gun to score on a 3-pointer. In 1975 the gun dropped a 7-pointer for the second son, and in the years that followed, two more bucks fell to the gun while in the hands of the youngest.

The first day of the 1986 buck season dawned cold, windy and overcast. Steve, the youngest son, had worked until almost midnight the night before, but was on his stand in northern Butler County before daybreak. He had seen a lot of deer sign in the area during archery season, and while spotlighting in the early fall he saw two nice bucks in a field nearby.

It was his gun now, mounted with a 4-12x Bushnell, which he had bought in 1979. He had sighted the gun in two days before and was satisfied it would do its part if the opportunity came.

Around 7:15 he saw the deer, some 70



**TWENTY-ONE** bucks were taken with the gun. For 58 years it had served a man and his three sons. It was more than wood and steel, it was a bond between them and over time. It was memories you could hold in your hands.

yards off, walking down the hollow in his direction. He immediately recognized it as a buck. He raised the gun and waited. At 50 yards the buck was broadside to him. He held behind the shoulder and fired. The buck went down on its side, but was up immediately and running. He worked the bolt, waiting for an opening through the brush. Just as he began the trigger pull, the buck went down. A second shot finished it. The buck had gone a good 50 yards before collapsing, even though the first shot had practically cut its heart in half.

The buck dressed out at approximately 125 pounds. A 10-pointer, its spread was small, only a little over 12 inches, but its tines were long (the longest being a little over eight inches) and symmetrical.



Twenty-one bucks were taken with the gun. For 58 years it had served a man and his three sons. It was more than wood and steel, it was a bond between them and over time. It was memories you could hold in your hands. It symbolized lessons taught and traditions handed down. And with each new hunting season, the tradition continues.

## “Birds of Prey and Farm Wildlife in Pennsylvania”

Hawk Mountain Sanctuary Association has produced a slide-tape program about the relationship between predators and farmland wildlife, particularly ring-necked pheasants and cottontail rabbits. The program, intended for sportsmen's clubs, Audubon chapters and other groups interested in wildlife conservation, explores this complex and controversial topic and also delves into the many ways modern agricultural practices are influencing all farmland wildlife. The program set consists of 63 slides, a written script, a cassette tape of the script narrated by Jack Hubley, and appropriate background materials. The program was supported by a grant from the Pennsylvania Wild Resources Conservation Fund and it may be obtained from the Game Commission's regional and headquarters offices. It also may be borrowed from Hawk Mountain Sanctuary, Route 2, Kempton, PA 19529 for a \$5 fee to cover postage and the cost of padded envelopes.

## Thoughts While Walking

*Never tell people how to do things. Tell them what to do and they will surprise you with their ingenuity.*

— George Smith Patton



**DON'T SHORT CHANGE** doe hunting. The target is hard to hit, the action is fast and furious, and the venison tastes a lot better than antlers. Don't knock it unless you've tried it. It's not as easy as you may think.

## Not As Easy As You May Think

# “Doe Season”

By H.T. Montgomery II

**E**VERY YEAR more than a million licensed hunters take to the Pennsylvania woods in search of an antlered whitetail. They spend countless hours and dollars chasing this wary creature from ridge to ridge, hollow to hollow, and thicket to thicket. Visions of trophy racks on 200-pound bucks fill the hunters' sleepless nights. Opening day finds them standing frozen beneath a snow covered pine as their eyes continue to search for their buck of a lifetime.

Unfortunately, for eight or nine out of every ten hunters, their season comes to an end with unfilled tags. Not only did that buck of a lifetime fail to appear,

the 100-pound spike also managed to elude them. However, there is always the antlerless season.

What, you did send for your doe license didn't you? What do you mean you wouldn't shoot a doe? Too easy! Now just hold on. That's not my experience. Deer are a real challenge, regardless of their head ornaments. Let me explain before you decide to put me in a padded cell.

I've been hunting whitetails for 26 years, and over that time I have been fortunate enough to take 26 deer—13 antlerless deer and 13 antlered bucks, as even as you can get. Those 26 deer have provided me with a wealth of sta-



**BUCKS, however, were easier. Eight of the 13 were opening morning shots, three in the afternoon. One in the afternoon of the second day and one in the morning of the last day.**

tistical data. Times, weights, direction of travel, reactions and distances are just some of the 55 different factors I record each time I drop a deer. The statistics I'm about to reveal may surprise you, but I assure you they are factual.

Let's look at the bucks first. Of the 13 I have taken, four were standing broad-side at an average distance of 44 yards. Six of the bucks were walking at an average distance of 34 yards, and the remaining three presented running shots at an average of 25 yards. At best, only three of the 12 (25 percent) required a difficult shot.

Now for the doe. One of the doe had been previously wounded by another hunter and was bedded down at 50 yards. Three gave me standing shots at an average of 42 yards. Only one was walking, at 20 yards, and eight challenged me with a running shot at a 42-yard average. Therefore, eight of the 13 doe (61.5 percent), represented a difficult shot. Taking these statistics one step further, the bucks were shot at an average distance of 35.8 yards, the doe at 40.8.

What can we ascertain so far from the figures presented? Certainly you would agree the number of bucks and does analyzed is comparable, and the volume is certainly adequate. But what about the quality of the shots and how were the deer acting?

### **Standing Deer:**

Of the four bucks I've shot while they were standing, only one sensed danger was near, and that was because he ran up to within ten yards before coming to a complete stop to look at me. The three standing doe, on the other hand, each sensed something was wrong, and was tense and ready to leave the county as soon as I was identified. It required more precise shooting on the doe because of their acute wariness.



### **Walking Deer:**

Six bucks have made the mistake of walking past my stand. Only one of the six was trying to avoid another hunter. The other five were out for a stroll, seemingly unaware hunting season had even begun. The only walking doe I've ever shot had managed to get around behind me and was sneaking down a trail to the apparent safety of a thicket. She also stopped twice to check her backtrail before a shot was available.

### **Running Deer:**

Of the three running bucks, two were running because of hunter pressure. The other appeared to be chasing a lead doe. The eight running doe presented quite a different situation. All eight were running at near full speed as a direct result of hunter activity.

Now, what have we proven? First, the 13 doe provided me with more difficult shots than the 13 buck, and, second, the doe sensed danger or hunter pressure more readily than the buck.

I'm sure there are still a few who feel a doe is not worthy of their hunting time. Well, how about this? Deer biologists tell us the doe is the leader of the deer

## Use 800 Numbers

Use the agency's toll free (800) numbers to contact a wildlife conservation officer. In the Northwest Region call 1-800-533-6764; Southwest Region, 1-800-243-8519; Northcentral, 1-800-422-7551; Southcentral, 1-800-422-7554; Northeast, 1-800-228-0789; and Southeast, 1-800-228-0791. Phones will be manned around the clock during the major hunting seasons, about 15 hours a day at other times.

"family." She determines what routes are to be taken and what dangers to avoid. Once the hunting season begins, that doe you saw at 7:05 a.m. on opening morning becomes a ghost, avoiding man with an instinct second to none. More than one hunter has failed to see a trailing buck because the lead doe sensed danger and fled with the buck following close behind.

I've heard some deer hunters boastfully exclaim, "If I couldn't drop a doe within the opening hour of the season, I'd quit hunting!" Well, my friends, the woods would be void of hunters if many made good on such a promise. Of the 13 doe I've taken, six were taken in the

morning hours and seven in the afternoon. Also two of the seven afternoon doe were taken on the second day. Combine that with the fact one of the six taken during the morning was shot with a muzzleloader on the last day of muzzleloader season. That leaves only five of the 13 that were taken prior to noon on opening day.

Bucks, however, were easier. Eight of the 13 were opening morning shots, three in the afternoon. One in the afternoon of the second day and one in the morning of the last day. Therefore, 11 of 13 bucks (84.6 percent) were opening day statistics where ten of 13 doe (76.9%) fell on opening day.

There are some of you who feel doe hunting is wrong and will not support nor even recognize its importance. Doe hunting is necessary to maintain a balanced healthy herd. Our mild winters have resulted in high populations in some counties. Without doe hunting the status of Pennsylvania's deer herd would eventually deteriorate, leaving all of the "trophy" or "rack" hunters wondering what happened.

Don't short change doe hunting. The target is hard to hit, the action is fast and furious, and the venison tastes a lot better than antlers. So, the next time you or your hunting pals put down a doe hunter or the concept of doe hunting, remember, don't knock it unless you've tried it. It's not as easy as you may think.

## Cover Painting By John Pisarcik

Nothing snaps a hunter to attention like the rustling sound of an approaching animal coming through the leaves and brush on a crisp December morning. More often than not, the sounds are something other than a trophy whitetail, but not always. One must maintain constant vigilance, therefore, because sooner or later a big 8 point will appear. That's just one of the reasons that makes deer hunting so exciting, and in Pennsylvania, popular, too. In recent years buck harvests have been averaging around 150,000 animals, a sustained yield higher than at any other time in our state's history. Roughly 90 percent of the buck harvest is comprised of year-and-a-half-old deer, too young to be sporting true trophy size racks, but the remaining ten percent (15,000 animals) hold the potential to be real wall hangers. The trophies are around, and maybe this will be your year—just be ready.





THE MINK is a trophy to most trappers. It is a quarry that is frequently hard to find and always represents one of the toughest critters to trap for those who strive to catch one of every species of furbearer available to Pennsylvania furtakers.

## Linking Up With Minks

By Joe Kosack

**A**LTHOUGH MINKS are found in every county of the Commonwealth, trappers rarely set traps specifically for them. It's not that most furtakers don't want to catch minks, it's just that they don't think they know how to trap for them or don't believe minks are found in their area.

The mink is a trophy to most trappers. It is a quarry that is frequently hard to find and always represents one of the toughest critters to trap for those who strive to catch one of every species of furbearers available to Pennsylvania furtakers. As a matter of fact, when it comes to trapping elusive critters in this state, the mink is shadowed only by the eastern coyote.

Of the 4000 to 5000 minks trapped annually in Penn's Woods, probably about 70 percent are caught in sets that

had been made for muskrats or raccoons. The remainder is taken by mink trappers who string steel along mountain brooks and trout streams and in marshes. Considering all this, it's apparent why minks are mysterious creatures to trappers, not to mention outdoor people in general. After all, relatively few mink are taken compared to the harvests of some other furbearers. For example, the statewide take of raccoons and muskrats each numbers more than 150,000 a year. One reason might be that most trappers know little about mink biology and they have little or no experience trapping them.

Still, this chocolate-colored critter isn't all that difficult to catch, especially for someone who has studied the animal's life-style and followed its tracks along a creek a few times. As a matter of

fact, once you find where some minks are, half the battle of catching them is over because they are frequently taken in the same types of sets that are used for raccoons and muskrats. However, modifications must be made in the blind and baited sets to take these weasel relatives.

### Same Habitats

Minks are typically found in the same habitats that are attractive to coons and muskrats. They like to hunt along the water's edge, searching the nooks and crannies of the bank for frogs, rodents, snakes, crayfish and other seasonal prey. When ice forms on streams, minks will swim in the water underneath in pursuit of sluggish minnows and panfish.

Muskrats also fall prey to minks, but they are not hunted with consistency unless other, lesser creatures are unavailable. Generally, a mink is not going to tackle a muskrat unless hunger or opportunity compels it to, because the rodent represents a troublesome prey. Muskrats not only swim better than minks, but they also pack a set of incisors that can easily give a mink more to worry about than an empty stomach.

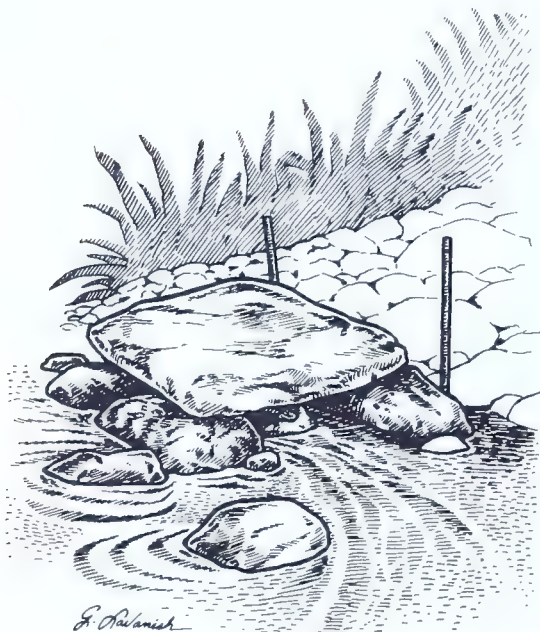
Muskrats are usually left alone by minks unless severe cold weather makes the food pickings slim, or drought

beaches the rodents from the escape outlets and safety that water provides. Even in such extreme conditions, though, minks will prey upon the young or disabled before they will tangle with a healthy adult muskrat.

Minks are companion creatures to muskrats, much as they are to beavers. Wherever beavers and muskrats set up shop on a waterway, the mink is sure to follow because the workings of those rodents provide ideal habitat for many of the prey this elongated furbearer pursues. Mink like to patrol muskrat and beaver runways, crevices of beaver dams and lodges, and abandoned muskrat dens and tunnels. In these "rodential" workings, mink swim after minnows, paw for crayfish and pounce on young waterfowl. In short, they enjoy what is usually an endless supply of food in the swampy settings that beavers and muskrats create.

The male mink, which is much larger than the female, is a circuit-runner that usually travels a system of creeks and other waterfronts that takes several days to complete. Females, on the other hand, are more the homebody type and rarely travel more than a few hundred yards from their dens. Knowing this may help you keep a healthy attitude about your sets for mink when they remain undisturbed for several days.

Along waterways, minks are generally bank runners that will hop in the water and wade or swim around most obstacles that block their waterfront path. Because of this trait, the mink is easily taken in blind sets that funnel it into a tight passage armed with a trap. Blind or trail sets can be made along steep creek banks where the flow is shallow, under washed-out root systems where tracks are found, and in the tapered mouths of small feeder creeks. In muskrat territory, however, don't hesitate to set a runway if you suspect a mink is



**TO CONSTRUCT a freeze-proof tunnel set, build two six-inch high rock walls about six inches apart from one another. Put a rock in the center of the channel between the walls and place your bait on it. Next, build a roof.**



using it. Ditto for small culverts and drainage ditches.

Because minks will enter the water when working a waterfront trail, this is where a trapper should place a blind set. Choose a spot where tracks show that a mink has hopped into the water to get around some sort of bank barrier such as a large rock or debris pile, and set your trap, preferably a coil spring or double longspring, where you believe it will place its paw when it steps into the drink. One of the finest locations for such a set is under a small bridge, where a wall or abutment has replaced the bank. Place the trap in a way that will allow the mink to step between the closing trap jaws, rather than over them. The trap also should be placed as close as possible to the obstacle because mink stay close to the edge when they enter the water.

In feeder streams and runways, trappers should taper the watery channel so the mink is forced to pass through a body-gripping trap or over a foot trap. If you use a body-gripper in a runway, force the mink to dive and swim through the trap opening by placing sticks and aquatic vegetation or weeds over the top of the trap. If you use a foot trap, make sure the water depth in the passage is no more than two inches, or the mink may swim over the trap.

Although blind sets are tops for mink, these long furbearers also can be caught in pocket sets, but the bait must be fresh. Minks seemingly cannot resist poking their heads into bank openings while they hunt, so they can be taken in pocket, hollow log and rock tunnel sets. If you choose to make pockets along a creek, use a variety of entrance hole shapes. There's no hard and fast rule that says a pocket must be circular, so try to make pockets that are patterned after some of the other cavities found in the creek bank you're trapping. It's not a bad idea to use a couple of traps to guard the entrances of these natural cubbies, too. Smear some mink gland lure or spike a piece of fresh fish in the rear of the cavity to attract minks to the entrance.

Tunnel sets are usually used along creeks without high banks or with shores that are too rocky to dig in. To construct a freeze-proof tunnel set, build two six-inch high rock walls about six inches apart from one another in flowing water that is one to two inches deep. Put a rock in the center of the channel between the walls and place your bait—either a chunk of fresh fish or crayfish—on it. Next, build a roof by putting a large flat rock on top of the walls or by placing sticks, smaller flat rocks and aquatic vegetation over them. To finish the set, park a trap at each entrance.

### Ideal Sets

Hollow logs found along the shore are ideal sets for minks because these furbearers are naturally attracted to them. Smear a dab of mink gland lure on the side of the log's interior and arm the entrance with a coil spring trap. Try to choose logs that have a watery doorstep or move the logs to the water's edge before mink season.

Regardless of which bait sets you choose to make, they should all be constructed along what you have deter-



### Question

I am a disabled person and have the required permit to hunt from my vehicle. May I, therefore, transport my firearm loaded?

### Answer

No, you may not. You may not load your firearm until you've pulled off the public highway, stopped the vehicle and turned the motor off.

mined to be a mink travelway because it's difficult to lure these creatures more than a couple feet off a trail. It's also important to construct baited and lured sets in a manner that will allow the wind to carry the set's odor across the path.

All traps should be fastened to wires or chains staked in deep water so the trapped animal will quickly drown. Place tangle sticks in the deep water so that once the mink works its way out there it will wrap the wire around a stick, be unable to return to the bank, and subsequently, will be pulled under by the weight of the trap.

Because the season for minks and muskrats opens on the same day, and raccoon season opens before that, it's usually a good idea for a trapper to set traps for minks, muskrats and raccoons along a waterway, if all three frequent the creek. As mentioned earlier, the same sets that appeal to minks often attract coons and muskrats, so why not trap all three? It's a good way to increase your trapline production and profits, because you'll probably end up taking all three in the mink sets anyway. Set

muskrat den entrances, slides and feedbeds and raccoon trails. Make a few cubby sets and dirtholes for raccoons.

Because male minks travel circuits, there's a good chance that you'll wait several days for mink action on the trapline, especially if you're setting a creek that is patrolled only by buck minks. Considering this, it makes good sense from a production standpoint to trap for muskrats and coons while you wait. Just remember that the traps at all mink and coon sets should be fastened to objects that will withstand the thrashings of a caught raccoon.

As you can see, there is little difference between mink trapping and muskrat and raccoon trapping. Along waterways where all three are found, a trapper will learn that these furbearers share trails, use the same culverts, and often hunt for food in the same areas. In light of this, it seems proper to note that most trappers already have some idea how to trap for minks; they just need to modify their muskrat and coon tactics somewhat to trap minks successfully. So what are you waiting for?

GLENN F. RUBANY, Oney, Maryland, dropped this fine 3-point last year in Berks County. Field-dressed, the trophy weighed 193 pounds.







**IN LATE** winter of 1986 I ordered a flintlock muzzleloading rifle from a catalog. The kit gave me not only an opportunity to build my own gun, but also served to get me through the late winter blahs.

## Black Rifle White Deer

**By Robert C. Gaffron**

**T**ODAY I KILLED my first deer with a flintlock. I didn't know it when I shot, but it was partly white. She was large and had four white legs and feet. The drag out of the woods was all up hill, but I didn't mind because a skiff of snow on the ground helped make it easier. As I loaded the deer onto my truck I couldn't help but reflect on the past couple years of hunting with a muzzleloader, and on the last few days of this season.

I have been fortunate over the past several years to harvest several deer with a rifle, but there have also been deerless years. During many of these years, work schedules kept me from hunting whitetails more than once or twice a season. If I had a muzzleloader, I often thought, I would have more time to pursue my sport because I normally have off the week after Christmas. So, in

late winter of 1986, I ordered a flintlock muzzleloading rifle kit from a catalog. The kit gave me not only an opportunity to build my own gun, but also served to get me through the late winter blahs. After talking with many people more knowledgeable than I about flintlocks, I decided on a 50 caliber. The gun arrived about two weeks after I sent the company a check, and I spent the next four weeks thoroughly enjoying myself building a rifle.

### Next Step

My next step was to learn how to safely shoot it. Again I looked up an experienced person, who safely guided me through the process of powder selection and ball size. Then, after reading a few good articles on blackpowder shooting, I hit the rifle range. Several times that summer I experimented with



**THE BLUE SMOKE** blocked out all chances of seeing if I'd connected or not. The shot looked good in my mind, though, and I figured I had hit the deer. The question was how far it would go.

day of the following season. Thus, I gave up my opportunity to hunt with a muzzleloader in 1987.

The deer season of 1988 found me deerless, so I once again took the old smoke pole from the rack and went in search of a whitetail. Again I concentrated my hunting on SGLs 50 and 82 in Somerset County. The number of hunters was again very light. In fact, I did not see another hunter during the first three days of the season. I did see deer.

The first day I spooked two different groups. The deer seemed to be still keyed up from the regular firearms season. They quickly bolted from cover and didn't slow down until they cleared the next ridge. The evening of the second day seemed more like fall archery season than winter flintlock season. It was about 50 degrees with a warm breeze blowing. I sat watching the edge of a field, waiting for quitting time. At about 4:45 I heard a deer approaching from my right. Unfortunately my rifle was lying across my lap, pointing in the opposite direction. When the deer came out of the woods it was only 25 feet away. She played one of those games where she'd stomp, snort and look down, then go through the whole process again. Finally, she decided I did not belong there, so she turned, snorted and headed for cover. I felt defeated—but only for the day.

The next day was Saturday and I thought there might be a few people in the woods moving some deer. I got up about 6:30 and wasted no time getting to the game lands. I was disappointed to pass two parking areas and not see a single car. Then, while preparing to head for the woods, I broke the strap holding my possibles bag, so I quickly put everything in one of the big pockets of my hunting coat. As I entered the woods I noticed that there was still a

different powder charges until I found one that proved to be the most accurate for my gun. I could hardly wait for the muzzleloading season to arrive.

The regular firearms season ended without me getting a deer, so come late December, I was ready for action. The first day found me hunting near Calimont, Somerset County, on a large game lands, and I was amazed at the light hunting pressure. I didn't get any shooting that day, nor during the several other times I got out that first week. I saw plenty of deer, but they were all too far away to offer any shooting.

On the final Saturday I saw a bunch of about 20. In the middle of this herd was a buck with a "rockin' chair" rack. I probably could have shot one of several doe that came within range, but I held out for a shot at the big buck. I had one chance. Everything seemed right. I squeezed the trigger, the powder in the pan ignited, but not the powder in the barrel. I was frustrated, for sure, but the excitement of this primitive hunting more than made up for it. I could hardly wait for the following season.

I shot a large 9 point on the opening



skiff of snow. This surprised me, considering the warm weather we had had the day before. With no one else in the area, I figured my only chance was to still hunt and hope to get close enough to a deer for a shot.

The sky was bright blue and the air was crisp and still. I hunted the side of the mountain, and because nobody was around to move any deer, I figured I might as well just take it slow and easy. I worked my way around the point of the mountain, and after about an hour of hunting I had noticed turkey tracks, watched two gray squirrels going at it, and listened to some crows harassing a poor hawk. Even if I didn't get a deer I was having a great time.

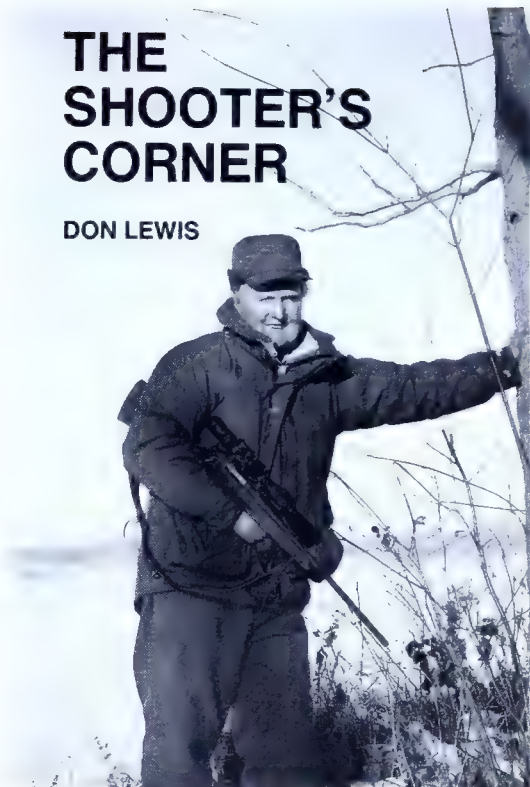
I was mentally reviewing the previous month's grouse hunt when I noticed several fresh deer beds. I put everything else out of my mind and began to concentrate on the business at hand. Despite my concentration, though, I was surprised to see the several white flags explode from a piece of cover just ahead. I dropped to one knee and froze. They ran only about 50 yards and then stopped to check behind them. I quickly picked out the one that offered the best, clearest shot, aimed for its shoulder, and squeezed the trigger.

The blue smoke blocked out all chances of seeing if I'd connected or not. The shot looked good in my mind, though, and I figured I had hit the deer. As I began the reloading process, the question in my mind was how far would it go. I managed to reload quickly, which surprised me because of my excited mood. I looked again at where the deer had been standing and tried to visualize in my mind the sight picture.

Walking quickly to where I thought the deer had been, I was surprised to find not even a track. I walked another 15 yards up through the woods and there she was. The 50-caliber ball had dropped her right in her tracks. I felt the same way I had when I shot my first deer. I also knew the satisfaction our

## THE SHOOTER'S CORNER

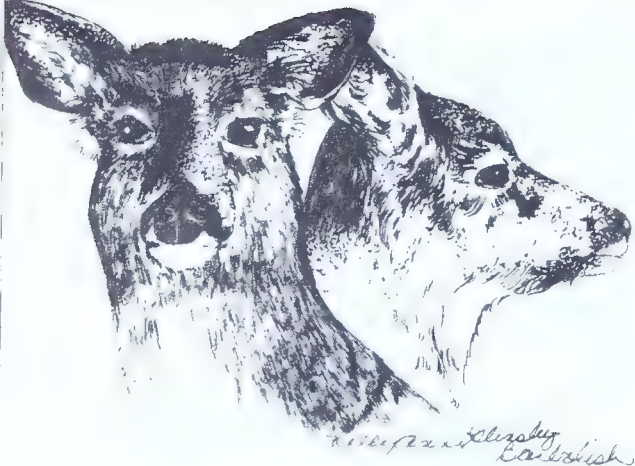
DON LEWIS



**THE SHOOTER'S CORNER**, by Don Lewis, is a 449-page hardcover book that covers nearly every facet of the shooting sports from a hunter's point of view. Beginning with the history of firearms, Don covers actions, stocks, and barrels; scopes and metallic sights; rimfire, big game and varmint rifles; shotguns, gauges and fit; and a whole lot more. Order from the Pennsylvania Game Commission, Dept. AR, 2001 Elmerton Ave., Harrisburg, PA 17110-9797. Price is \$15 delivered.

ancestors must have known a century ago, when they hunted these same hills with a similar gun.

I quietly thanked God for providing such a fine animal and allowing me the privilege to partake in the hunt. I replayed the shot in my mind again, and thought about how different this type of hunting is from the regular season in which, as often as not, success is simply a matter of having somebody drive a deer to you. Dragging my trophy from the hills, I had to admit, it was a beautiful day in Pennsylvania.



# A Choice of Seasons

By Tom Prusaczyk

THE BEECH FLATS along Big Sandy Creek looked barren. Sleek gray trunks stood naked, most of their copper-colored leaves frozen to the ground. A determined few clung by their petioles. Deer abounded. Trampled trails and frozen tracks evidenced their passing. I, too, passed through, heading for the hollow above the railroad. I met South Sandy and walked along its bank towards the small trestle that bridged the creek. In the distance, a truck rumbled towards me. A few minutes later, it stopped before the trestle, above me. A weathered hunter rolled down his window and asked me how I was doing. A boy looked over his shoulder.

I didn't respond until I had climbed the bank and walked to their truck, and then with my usual cliché of "not too bad," which meant I had seen only one deer during the past day and a half. One topic led to another, and we talked for ten minutes about the access provided by the salvaging of the railroad, touchy hair triggers, a spent 4-point antler the boy had found early in the morning, and other items. Then, in all sincerity, the man told me he didn't believe the Game Commission's deer herd estimate.

"When you're hunting them, you can't find them," I said after thinking for a moment. "When you're not hunting them, they seem to be everywhere."

The man and boy nodded agreement.

"I better stop gabbing and start hunting if I want to see some deer," I said, smiling.

Another truck was parked on the right side of the trestle, so I crossed the icy structure, looking between the ties at the clear but colorful water below. And I waved as the man and boy drove by. Safe again on hard snow, I left the railroad and cut uphill on a deer trail through a stand of hemlocks. Icy boot prints showed that another hunter had walked this trail a couple of days earlier.

The hemlocks gave way to hardwoods, and I slowly walked along the edge into the hollow. Gray clouds overhead darkened the woods, making it seem later than 3:30.

Conditions for a still-hunt weren't good. Warm weather had softened the snow pack on Sunday, and it had frozen again during the night. Bare spots freckled the woods, and the snow crunched as I plodded along. I didn't care. Maybe I would push a deer to someone while I explored, I thought. Besides, the walk felt good after playing a very cold chess game on the upper side of the state game lands. Hunters and deer were the pieces.

A good number of sportsmen toting muzzleloaders had hunted the game lands on Saturday. Some stood and others moved. Nothing orderly. I positioned myself in a couple of good spots. The deer were there, but to my chagrin, I didn't see any live ones. Other hunters had walked by during the day, but they didn't push any deer to me.

Meeting a successful hunter at a





*Kelly Ann Dinsley - Bartolish*

THE DOE RAN low, her tail seeming to propel her even faster, until she reached the small rise, where she bounded twice and disappeared, disturbing me a little.

mountain laurel-studded knoll was my consolation. At a rock where I had sat years before, I noticed that someone had been there during the morning. I then looked to the base of the knoll and was surprised to see an orange-clad hunter standing over a deer.

I walked down to congratulate him and see his trophy, a nice doe with a gimp back leg. He had seen that she limped as he watched her and three others come through the open woods and stop at the base of the knoll. He was happy with her. We deduced a vehicle probably had bumped her.

I sat on the rock after the hunter headed home to New Castle and was looking at the trees to my left when I spotted the scar I had left on an oak. Two does had ran through the open woods and stopped at the knoll to look back, four years ago. Impatience overrode patience. I tried to lean past the tree and send a 53-caliber ball to the closest deer. The ball nicked enough of the oak to deflect harmlessly. And the does added insult to injury when they stopped for a moment to watch me re-

load. I guess we learn most from our mistakes.

The results from this morning's hunt were almost identical to Saturday's, but I did see a running deer, 300 yards away. Cold, I quit at one o'clock to go stand by a kerosene heater while I ate something for lunch. But cabin fever hit by three, so I traded my work boots for hip waders and left for Polk Cutoff.

Reality snapped back when I came over a small rise and saw a deer walking downhill, 70 yards across the hillside, this side of another small rise. I froze, then realized if I wanted to press my Hawken against a tree to steady it, I would have to take two more steps to a skinny red maple. Either the deer would run, or I would get a good shot. Crunch, crunch; the deer stopped alongside of a small hemlock. It had heard me.

I knew where the deer stood, but I could barely see it against the dark background and through the saplings between us. I pulled the hammer to full-cock, holding my left hand in front of the lock to muffle the click, then pinched the forearm of the stock against

the maple. For a few long minutes I watched the outline of the deer's face as it tested the air and looked around.

I thought the standoff would go in the deer's favor when a strong draft swept by me, carrying my scent towards it. I cursed the gust, watching the deer to see if it would take a step into the open before dashing away. If the deer did, I might get a shot. Otherwise, I would just watch. I had no intentions of taking a bad shot. The wind corrected the dilemma. And I breathed a sigh of relief when a breeze swirled downhill, carrying my scent away—probably inches from the deer's nose.



The deer took a couple of steps uphill and stopped with its chest behind an oak. I aimed for an open spot uphill of the oak and squeezed the set trigger. The antlerless deer didn't go where I expected; it disappeared behind a series of trees. I aligned the muzzleloader with another open spot. And waited.

When it didn't show after three or four minutes I began to wonder. I don't like the idea of holding my muzzleloader with the trigger set for such a long time. I looked around the trees, then slightly downhill. A doe was walking towards me, 30 yards away. A large flat boulder stood between us, so I

could see only her head and back, then just her head. She stopped, looked uphill and down, and then beyond me. When she started walking again, I crouched a little and beamed with the prospect of getting an easy shot.

The doe lifted her head from time to time. All I could see was her ears, but that's all I wanted to see for the time being. For a few moments, I didn't know if she would appear downhill or uphill of the boulder. I just waited. When she veered uphill I sighted my Hawken on a chest-high spot a foot beyond the boulder.

Her ears popped up once more, five feet from the edge. The doe spotted my six-foot three-inch, 200-pound kneeling form the instant she stepped from behind the boulder. Immediately she straightened up to get a better look at me. Her ears were oriented right on me. I pressed my cheek against the stock, barely moved the sights, and touched the hair trigger. A plume of smoke clouded the scene.

**SLEEK gray trunks stood naked, most of their coppery-colored leaves frozen to the ground. A determined few clung by their petioles. Deer abounded. Trampled trails and frozen tracks evidenced their passing.**

I stood up and looked over the boulder. The doe ran low, her tail seeming to propel her even faster. Three other forms ran with her. I was so focused on the doe, I didn't notice the genders of the other deer. The doe ran low until she reached the small rise, where she bounded twice and disappeared, disturbing me a little.

Any doubt vanished when I found a few cut hairs at the spot where she last stood. I followed broken snow to the rise, where I found a splash of blood. No need to follow a blood trail. I looked ahead and saw her lying 20 yards away.

Work began, and it wouldn't be finished until the late side of dusk. I needed to tag and dress the doe, then drag her a little more than a mile—



along the hillside, over the trestle, through the flats, across Big Sandy and a couple of its branches, and between rows of corn stubble. I took my time with careful moves, out of respect for the deer.

As I tired, dragging the doe across the cornfield, I looked at the black hills and the purple hint between the gray clouds. Headlights flowed on the road. And I remembered what a man from New Castle had said:

"I passed up spikes during buck season so I could hunt during the muzzle-loader season," he said, looking at the doe with a gimpy leg. "I guess I just like

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**GAME NEWS**

For a Friend . . .

to hunt with a muzzleloader."

My sentiments exactly, I thought as I leaned on the rope again, having it bite deeper into my shoulder. This winter I wouldn't have to regret passing up a five-yard shot during the archery season and working through the buck season.

## *Books in Brief...*

(Order from publisher, not from Game Commission)

**Pioneer Life or Thirty Years a Hunter**, by Philip Tome, a reprint of the 1928 ed., available from the Lycoming County Genealogical Society, PO Box 3625, Williamsport, Pa. 17701, 180 pp., \$20.58 delivered. This little classic was originally published by the author in 1854. Few copies of that small edition now exist. It was reprinted in 1928, with a preface by Henry W. Shoemaker, then chairman of the Pennsylvania Historical Commission, and again in 1971. This new edition (only 1000 books have been printed) will, as Shoemaker earlier wrote, "help preserve one of the most valuable and interesting records of early frontier life and history relative to the State of Pennsylvania." The book shows that game—deer, elk and bear—was a primary source of food in north-central Pennsylvania in the period discussed, and indicates that Tome and his brother took approximately 300 animals per year for this purpose, not all for their own use, of course. Among the more unusual observations are those on poisonous snakes (largely inaccurate in light of today's knowledge), and accounts of capturing live elk, which have the ring of truth. There is also interesting material on the legendary Seneca Indian, Chief Cornplanter, for whom Tome served as an interpreter, and the Genealogical Society has added a useful index. Any Pennsylvania hunter or historian will find this book fascinating.

**Marlin Firearms, A History of The Guns and The Company That Made Them**, by Lt. Col. William S. Brophy, USAR, Ret., Stackpole Books, Cameron & Kelker Streets, Harrisburg, Pa. 17103, 696 pp., large format, \$62.95 delivered (plus 6 percent sales tax in Pennsylvania). In 1863, John Mahlon Marlin's goal was to produce a marketable derringer-type pistol. His dream grew into one of the world's great gun manufacturers, and this monumental work by Col. Brophy, based on 15 years of research, details every fact known about the evolution of the Marlin Firearms Co. that can reasonably be put between the covers of one book. Section I goes into the different periods of what might be called the Marlin empire—the men who directed its course, the guns and other enterprises, Marlin's involvement in production efforts for several wars, etc. The second section gives detailed information on the firearms themselves, the handguns, Ballard rifles, the lever, semiautomatic, bolt and pump action rifles, and the shotguns. Section III is an expanded glossary of over 200 pages which explains, describes and illustrates much Marlin-related material. Countless photos also contribute to the value of this huge volume. It will be the primary Marlin reference indefinitely.

## Passing the Buck

**ARMSTRONG COUNTY**—Upon arriving here I knew I'd be faced with the specter of WCO Al Scott, who served this district for 13 years before transferring to Berks County. I was prepared to hear "Al wouldn't have done it that way," or "Al would have known where I meant." I was not prepared, however, upon citing several individuals, to have one of them exclaim "This is all Al Scott's fault." — WCO R.F. Weaver, Rural Valley.



## Justice

**INDIANA COUNTY**—A yearling bear recently paid a brief visit to the Indiana Borough and promptly became the center of attention. After an hour of being pursued by many curious residents, three local police cruisers, one State Police car, and a Game Commission Jeep, the thoroughly confused bear tried to break in to the offices of the Marcus law firm. With the law on his trail, I guess the bear wanted to consult an attorney. He later went up a tree, though, was tranquilized and then escorted from town, none the worse for wear. — WCO Mel Schake, Indiana.

## Lend Your Support

**CHESTER COUNTY**—One of the many rewarding aspects of a job in wildlife management is to see species such as the bald eagle, osprey and river otter making recoveries in the state. Unfortunately, many people don't have the time to get so involved in conservation, but many organizations, such as the various nature conservancies, have done an outstanding job in preserving our outdoor heritage. Please, lend your support. Join one or more of the many worthwhile groups. It's not too late to make a difference. — WCO William C. Ragosta, Nottingham.

## Impressive

**VENANGO COUNTY**—I was at the region office, watching our turkey trappers and a biologist get ready to test some new loads for the cannon net. Every precaution was taken to ensure that everything was done safely and properly. Our biologist explained how the old charges would not propel the net fast enough, allowing some turkeys to escape. He said the new charges were designed to get the net out faster and straighter and, therefore, avoid losses. I was impressed with the time and care devoted to setting up the demonstration. But I was really impressed when they launched the rockets. The cables holding them to the net snapped immediately, and the rockets flew at least 100 yards through the thick woods and then traveled another 50 yards after touching down. If our biologists can figure out how to keep the net attached, I'm certain there's no turkey around that could ever fly out from under it. — WCO Leonard C. Hribar, Seneca.



## Major Problem

A year or so ago the Game Commission got involved with a streambank fencing program, which is designed to promote the fencing of waterways to control erosion and pollution. Although our demonstration areas have shown how muddy sterile streams can be transformed into clean productive waterways in just a year's time, simply by keeping livestock and crops away from the banks, the response to this program has been slight. I can't help but wonder when people are going to finally understand that our water and other natural resources are being lost or destroyed faster than most of us realize, and that the time to do something about the problem is now, while there's still time.—LMO Ron Sutherland, Mount Gretna.

## 31 Skills

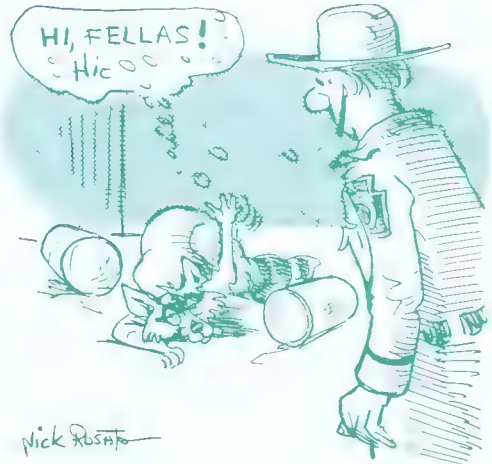
**BUTLER COUNTY**—I read in an old issue of an outdoor magazine that a wildlife conservation officer is a “jack of 31 trades.” The list included such titles as biologist, mammalogist, ornithologist, mechanic, farmer, typist, orator and school teacher. I've been on the job only a short time, but I've already learned the author was right. I just hope by the end of my career that I've mastered at least a few of those 31 trades.—WCO David W. Donachy, West Sunbury.

## Major Offense

**BEAVER COUNTY**—Not long ago I approached a group of young men who were shooting at a squirrel with a pellet gun. I proceeded to inform them of the law and how much the fines could total when one of them interrupted me and asked that he be allowed to return home before he got in “real” trouble. It was almost dinner time and he said that if he was late he would be grounded for the rest of the summer. Threats of heavy fines and jail time deter some, but others . . . ?—WCO K.A. Falasco, Beaver Falls.

## Get Used To It

**LANCASTER COUNTY**—Witnessing the birth of our first child, Justin, was an exciting and proud moment for me. Immediately after the delivery, the resident intern assisting the doctor learned I was a wildlife conservation officer, and the conversation quickly focused on the Game Commission. My son, barely a few minutes old, was quickly indoctrinated into the world of conservation.—WCO Dennis L. Neideigh, Salunga.



## Hung Over

Pest control agent Walt Savitz, Northampton County, received a call at 5:15 one morning from a homeowner who had a sick raccoon on his porch. Walt was there in minutes, only to learn that the homeowners had hosted a large lawn party that evening, and that many half-filled glasses of wine and beer had been left scattered about. Well, the booze was all gone at this point, and Walt knew exactly where it had gone. Walt slipped a noose around the raccoon's neck without a struggle, and the animal politely walked along to the cage, got inside, and fell fast asleep—on its back with all four legs pointing straight up. As Walt tells the story, the poor raccoon had a hard time just turning its head even after several hours sleep. The next day, when the callers asked what they owed him for his troubles, Walt replied, “Forget it. The laugh was worth the trip.”—IES Mike Schmit, Southeast Region Office.



### Well Deserved

**ADAMS COUNTY**—Early one morning last August Deputy Bob McCullough found a dead deer lying along the road, about a mile from his home. The deer had been shot, most likely the night before, and Bob could see where it had been dragged down to the road. While wondering why the poacher hadn't taken the animal, Bob stepped closer and immediately found out why. While dragging the deer out, the poacher or his assistant placed it directly on top of a nest of yellow jackets, which no doubt attacked with a vengeance and sent the culprits scurrying. —WCO L.D. Haynes, Gettysburg.

### Needless

**ALLEGHENY COUNTY**—With the hunting seasons in full swing, sportsmen should remember not to leave any trash in the woods. Even the smallest bit of litter can be harmful to wildlife. For example, last June I had to investigate the death of a great blue heron in Charters Creek. The heron's wing had gotten tangled in some string somebody had carelessly left behind, eventually causing the bird to drown. Special thanks are nonetheless due to Corporal Patrick Keally and Officer Ron Fleischer of the Upper St. Clair Police Department for their concern and efforts to save the beautiful bird. —WCO E.B. Steffan, Pittsburgh.

### Pack It Out

**LEHIGH COUNTY**—In just two month's time my deputies and I issued 18 citations for littering. Come on, folks, let's clean up our act and treat our game lands with respect. Please, don't litter. —WCO Tim Grenoble, Fogelsville.

### No Repeats

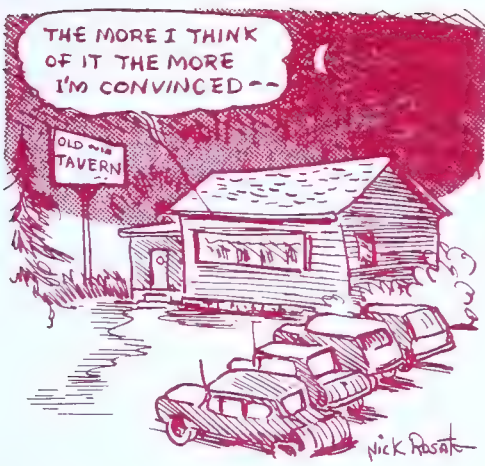
**SUSQUEHANNA COUNTY**—Imagine a 30-pound beaver running around the main street of Montrose, slapping its tail and trying to elude a 6-foot, 3-inch, 235-pound officer, with motorists stopping and watching in amazement. Imagine the officer finally catching the rodent and returning it to the livetrapp, which had fallen from his vehicle only minutes earlier. We don't have to imagine, though, do we LMO Chet Harris? By the way, is it true the mayor asked if you could put the same show on every Friday night? —WCO Charles J. Arcovitch, Kingsley.



### Precooked

**CENTRE COUNTY**—While sitting in the parking lot of a local supermarket I watched a house sparrow pluck dead bugs from the grills and radiators of parked cars. Aside from the fact she seemed to prefer the crispy critters, I thought it was a neat example of how wildlife can adapt to a city environment. —WCO Jack Weaver, Bellefonte.





### Nothing Concrete

**LYCOMING COUNTY**—This seems to be a banner year for cougar sightings in my district, and many people have asked me about the likelihood of these large cats being present in the state. Despite the many reports my fellow officers and I have received from very reliable people, nobody has yet come up with any track, hair sample, scat, or any other tangible evidence. Therefore, as it stands now, cougars in Pennsylvania are like Abominable Snowmen, an unsolved mystery.—WCO Daniel Marks, Montoursville.

### Ready To Eat

**SUSQUEHANNA COUNTY**—Retired Deputy Bob Elliot and his granddaughter had some cherries for a snack one day last summer. When she got home later that night the young girl asked her mother for some more cherries and said that she wanted them “gutted” for her, just like grandpa had done.—WCO Scott J. Lorow, New Milford.

### Common Courtesies

**PHILADELPHIA COUNTY**—With the holiday season fast approaching, take time to thank the landowners who let you enjoy their lands. A small gift or card would be appreciated and make you welcome again next year.—WCO Richard J. Shire, Philadelphia.

### Different Ethics

**LYCOMING COUNTY**—I was watching a father and his kids fishing a native brook trout stream and saw one of the young boys catch a trout smaller than the legal size limit. With help from his father, he safely returned the fish. When I talked to the boy’s father he told me that his father had brought him to this stream when he was young, and that he wanted his children to have the same experience. Later that day I stopped to explain to three fellows why it’s illegal to camp on State Game Lands. While we were talking I discovered that they had been fishing for several days, and when I checked the fish, I found that they had kept 56, every one of which was too short.—WCO Ronald Stout, Jersey Shore.

### Readily Available

**YORK COUNTY**—Last summer I visited Glacier National Park in Montana. This park consists of about a million acres in the United States and Canada, and contains some unbelievable breathtaking scenery. People come from all over the world and spend hours scoping the landscape for a glimpse of bighorn sheep or Rocky Mountain goats. This made me think of Pennsylvania and how available our wildlife populations are, particularly deer, to anyone who wants to enjoy them. And you don’t have to drive 2700 miles, either.—WCO Greg Houghton, Emigsville.

### Over Anxious

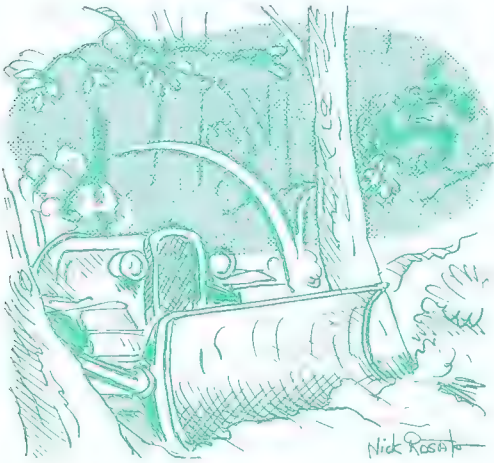
**WAYNE COUNTY**—When some young men reported finding an injured eagle there was a rush of activity to rescue the endangered bird. I arrived at the scene, however, only to find an immature vulture that apparently was a little over anxious to leave its nest site on a rocky ledge. I guess this is what happens when you try to soar with eagles when you’re not quite ready.—WCO Donald R. Schauer, Honesdale.

## A Great Activity

**McKEAN COUNTY**—Fur prices have hit rock bottom just as raccoon and fox populations have increased tremendously. Though you may not get rich, this seems to be a great year for trapping because competition is so low. Furthermore, to get even more from the sport, you might consider tanning hides at home for personal use.—WCO John Dzemyan, Smethport.

## Differences

Last summer I spent a week in the backwoods of Ontario, and it wasn't until I returned home that I realized that for the entire week I hadn't seen any sign of deer, not even a roadkill. Of course, back in Pennsylvania, it was a different story.—LMO Jerry Becker, DuBois.



## Never Again

Food and Cover employee Dan Kon-savage was doing some road work on SGL 110 with a bulldozer, and as he was backing up, the blade caught the root system of a tree. Unbeknown to Dan, there was a rattlesnake up in the tree, and when the tree got snagged, the snake was catapulted towards the dozer and landed within inches of Dan's arm. Well, Dan learned that his heart is in fine shape, and his next welding job was to install side gates on the operator's cage of our bulldozer.—LMO S.L. Opet, Tamaqua.

## Have The Experience

**SNYDER COUNTY**—Not long ago I was dispatched to a residence where a mischievous rascal had gone down the chimney and gotten stuck. By the time I arrived, though, he had already been rescued and released. The culprit was not a raccoon, nor was it Santa Claus, it was my son. We often praise our deputies for the work they do, but I'd like to use this opportunity to praise and thank the Beavertown Volunteer Fire Department for their quick and professional response. Now I'm wondering if they'd be just as good with raccoons.—WCO John B. Roller, Beavertown.

## An Exception

**SCHUYLKILL COUNTY**—WCO Scott Bills and I were patrolling SGL 211 one day last summer when we came upon several people dressed for an afternoon of swimming. They were sitting on the bank of a lake, not far from a "No Swimming" sign. While I was explaining the regulation and that it carries a \$100 fine, Scott's dog defiantly dived into the lake and swam around in circles right in front of the group. I wonder how many dog biscuits it takes to equal \$100.—WCO Steve Hower, Tremont.

## Bad Company

**ELK COUNTY**—On July 19 three teenage boys started out for a hike on SGL 44 and got lost. After several hours they heard some shooting and then saw three men, with guns, operating ATVs on the game lands. Instead of asking for directions or a ride, however, they hid until the men had passed, and then walked for several hours before coming to civilization. The Brockway Police Department contacted me because the boys didn't know the location or the name of the camp they had started from. After a short interview I knew where they belonged and then took them back. I found it interesting, though, that even in times of stress and need, some people just won't associate with game law violators.—WCO Dick Bodenhorn, Ridgway.



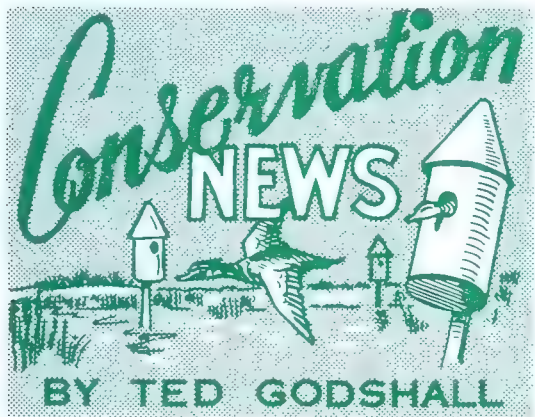


THE BUCK KILL per square mile of forest land in Bradford County wouldn't have been quite so high if it hadn't been for the five-for-five success of this crew. Pictured left to right are Lenny Insalaco, Jr., Bob Kalasavage, Frank Solano and Lenny Insalaco, Sr. The fifth, Dave Solano took the picture; the group's host, Al Newhart is in the background.

## Top Buck Counties

**H**UNTERS LOOKING for the best odds on taking a buck would do well to stick with top buck harvest rate areas of the recent past, Game Commission records show.

Last year, buck hunters took 12.2 bucks per square mile of forest habitat in Washington County, tops in the state. Berks County, which had been the leader in previous seasons, slipped to second place, with a harvest of 12.0 bucks per square mile of forest.



Other counties traditionally in the top 10 continued to show up there, with a few exceptions. Following the leaders were Columbia, 10.8; Montour, 10.5; Bucks, 10.1; York, 10.0; Northampton, 9.7; Armstrong, 9.6; Greene, 9.5; and Lehigh, 9.4.

One of the measures used by the Game Commission to pinpoint buck hotspots is the number of antlered whitetails taken per square mile of forested range—the best natural whitetail habitat. This is quite different from total numbers of bucks taken.

Over the years, hunters have tended to think of Potter, Tioga, Clearfield, Centre, McKean, Bradford and perhaps Huntingdon as the top deer counties. If only total harvests are considered, that is perhaps true, but high buck harvests are recorded in those counties largely because of the acreage and hunters involved. When it comes to an individual's best chances for getting a buck in the woods, another story is told by the buck harvest rate per square mile of forest.

Actually, the number of bucks taken per square mile of forest in the big deer counties mentioned is Potter, 5.2; Tioga, 6.9; Clearfield, 6.4; McKean, 4.8; Bradford, 8.0; Warren, 5.5; and Huntingdon, 6.3.

It's understandable that hunters might want to drive hundreds of miles to

a camp which perhaps has been a favorite hunting place for generations, but they might have a better chance of taking a buck elsewhere, possibly even close to home. Those dissatisfied with recent buck success may want to consider changing to another area where hunters score better.

## The Mistletoe Mystique

Mistletoe is nothing more than a parasitic shrub that grows in the crowns of broad-leaved trees. Yet, according to *National Wildlife* magazine, people have often invested the plant with supernatural powers—in addition to letting it provide an excuse for a holiday kiss. For centuries mistletoe was a source of wonder and an object of worship for humans. Because the shrub grows high in trees, without apparent roots, many ancient civilizations attributed magical powers to it. In some countries people believed crops would grow better if mistletoe adorned the fields. In other places warriors attached sprigs of the plant to their weapons to help protect them from injury or to ward off demons.

The pleasant custom of kissing under mistletoe is thought to have originated in Norse mythology. Many Scandinavians have since believed that if two people should embrace beneath a tree where mistletoe is growing, they would be blessed with good luck and healthy lives.

More than 1,000 species of mistletoe are found throughout the world, but only two principal kinds grow in this country: American, or leafy, mistletoe and dwarf mistletoe. The latter, a diminutive, needle-leaved species, causes widespread damage to pines and other coniferous trees. Its sprigs are too small to be used as a decoration.

American mistletoe, on the other hand, is an important part of our Christmas tradition. It grows among the branches of deciduous trees from central New Jersey to Ohio, Indiana, and Missouri, south to Florida, and west to

Texas, New Mexico, and some areas of California. It owes its success, in large part, to those species of birds that eat its berries and then transplant the seeds to other host trees when the creatures wipe their bills, or leave their droppings containing the seeds, on branches.

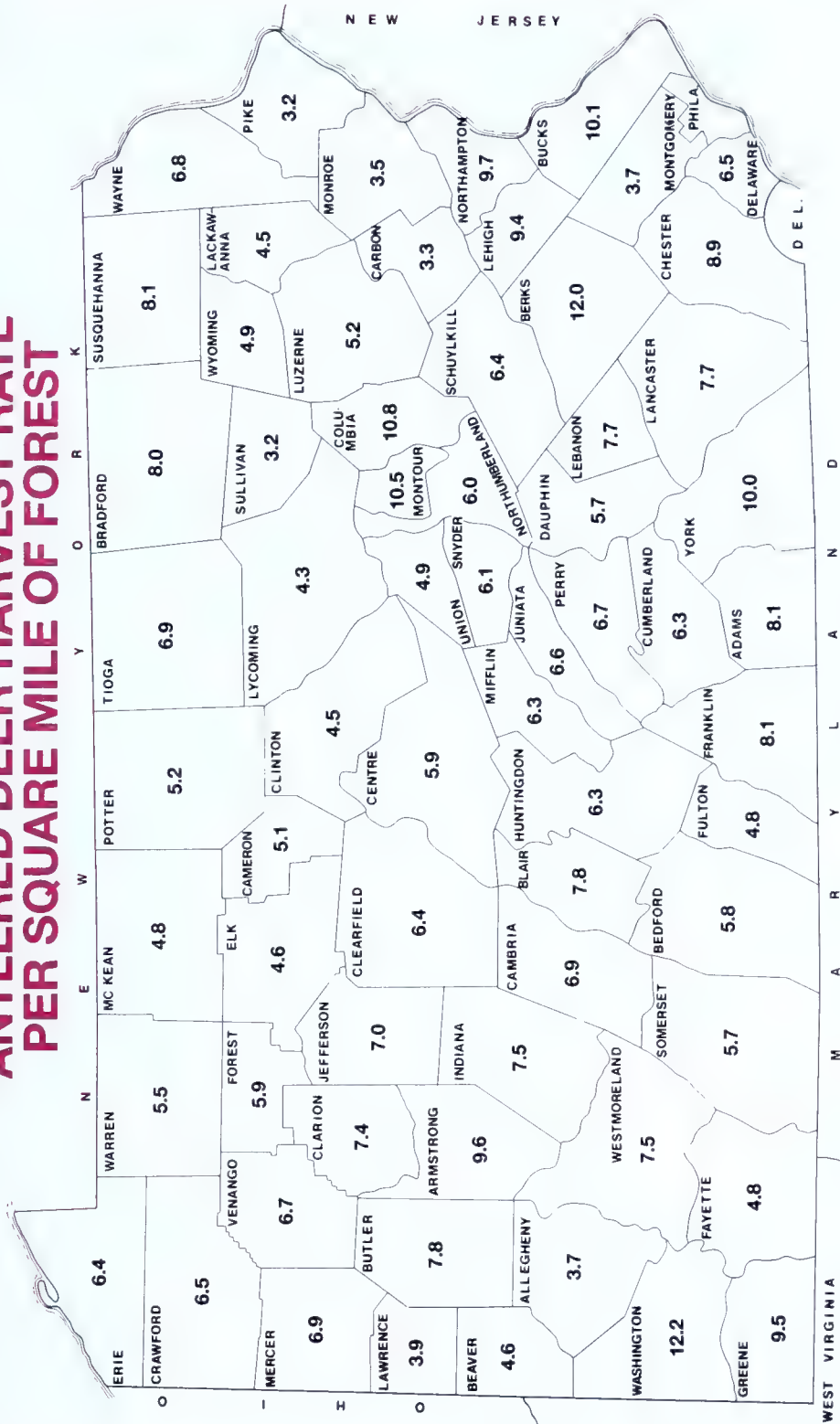
After the sticky seeds germinate, they penetrate into the branches with the aid of a built-in, rootlike structure called a haustorium—a term derived from the Latin verb *haurire*, meaning “to drink.” Eventually, the mistletoe plants grow into spherical clumps. Their leaves contain chlorophyll and undergo limited photosynthesis, thus helping the shrub to fulfill some of its food requirements. However, the parasite draws all of its water and mineral salts directly from the host tree.

Mistletoe clumps often form globes 5 feet wide that weigh more than 50 pounds. In providing fluids for such a large parasite, the host tree sometimes weakens so severely that it dies. Generally, though, American mistletoe does little permanent damage to the tree.

By early winter, translucent berries about the size of currents ripen on the clumps and become an important food source for many birds. A sticky substance covering the berries forces the birds to clean their bills and feet, usually by rubbing it off on the trees. In doing so, the birds inadvertently force the mistletoe seeds, caught in the sticky substance, into crevices where they will eventually germinate. The parasite remains green throughout the year, even during winter when the host tree has lost its leaves.



# 1988 ANTLERED DEER HARVEST RATE PER SQUARE MILE OF FOREST



STATEWIDE RATE: 6.2 ANTLERED DEER PER SQUARE MILE OF FOREST  
TOTAL ANTLERED DEER HARVEST: 163,106

# Fun Games

## “WILDLIFE NEEDS PINES”

By Connie Mertz

Many species of wildlife use pine trees during their life cycles. Can you find the ones listed below?

C C  
H O  
L I G P  
O A C H R R  
N N R K A B E E  
G G O S A B C K A L  
E R W O O D L E P I T E  
A A O N C I E R Q U G O H R  
R Y P U D C R E N C O W I L O R  
E S W A S O A B I E S T I B B A R I  
D Q D E S E H R L T H V O T U L C C N U  
O U P R B B Y T O G A W P O R C U P I N E Q  
W I L D T U R K E Y W V E I I W K E R D E U D S  
L R A J A N G E S T K A J O N P I S J A E V Q N O D  
P R E K C E P D O O W D E T A E L I P A E E A R T W W E  
R E D T A I L E D H A W K N E O W U R K Y F G R B B P V L R  
T L R E D B R E A S T E D N U T H A T C H A J W O R C W G E E P  
B B A R  
D L R B  
O E E L  
V C E E  
E V L R

Chickadee  
Porcupine  
Rabbit  
Bluejay  
Wild Turkey  
Crow  
Red Squirrel

Deer  
Grouse  
Great Horned Owl  
Dove  
Raven  
Red-tailed Hawk  
Raccoon

Hare  
Gray Squirrel  
Goshawk  
Long-eared Owl  
Red-breasted Nuthatch  
Pine Warbler  
Pileated Woodpecker

Unscramble the colored letters to discover one wildlife use for pines in winter.

\_\_\_\_\_

answers on page 62



# Patience

I CAN GUARANTEE you'll tag a deer this year. How is no secret. In fact, it's at the core of every piece of deer hunting advice you've ever gotten. What's the magical answer to hunting success? Patience.

Patience is the only surefire way to tag game. It's elementary logic. Go into the woods. Find some sign that indicates deer have used the area. Sit down and wait. Eventually, the animals will be back, because something real made all those tracks.

But suppose you're not the patient type. Suppose you're just the opposite. The idea of staying on a deer stand all day, hour after hour, without moving, is enough to give you hives. Are you the kind your friends call "antsy" because you can't seem to sit still? Do you have "itchy britches" and "rambling toes" because you can't seem to remain in one spot very long? Do you enjoy hunting, but not the interminable wait for action? Then I have some ideas for you. There are no guarantees, but I'll warrant these options for impatient hunters will help make things happen.

I consider myself as patient as the next hunter, but after nearly 20 seasons in the deer woods, I know my limitations. Unless there is an unusual amount of excitement, shots ringing out close by and deer running past every half-hour, three hours is as long as I can stay on stand, even on an opening day. For the remainder of the season I start to get restless after just two hours.

Once the fidgets set in, I know I may as well move. Rather than fight it, if you're the impatient sort, it's better to give in. Here's why. If you are restless on stand, and it's not because you're wet or cold, the problem is attention. You may be getting bored. It's not that you want to leave the woods, but that you need something new to do, something different to look at.

I know that after a couple hours of scanning every inch of my surroundings,



When still hunting is practiced correctly, it's like a moving stand. A surprising amount of territory can be covered, into areas where a hunter's impatience may be rewarded.

looking for the revealing flick of a deer's tail, the brown-gray of fur that's a shade off from the brown-gray of tree stumps, my eyes and my mind need a break. I become sloppy. I've seen it all before. I'm not as keenly alert for the signals that say "deer" as when I first sat down.

It's to no advantage to force myself to stay put when I get to that point. So I opt for some hunting methods that are nearly as effective.

The first of these is still hunting. Few people understand still hunting. They think it's going for a walk in the woods with a gun. Still—or sneak—hunting, when done correctly, means someone is going so slowly you have to align him with a tree to see if he's moving.

When still hunting is practiced that way, it's a moving stand. A hunter is trav-

## Another View...

by Linda Steiner

eling so slowly, placing every foot so deliberately and quietly, he can be as aware as on a fixed stand. A surprising amount of terrain can be covered, into areas where a hunter's impatience may be rewarded.

But suppose you're high-strung enough that before you know it, the accelerator inside you has gone from stalk to a brisk walk. Here are some suggestions. Go ahead and hike from stand to stand. Try to be as observant and light footed as possible, but satisfy that urge to travel and change your surroundings. The time actually spent en route will be short, compared to the time spent sitting or standing motionless at the next site. Physically and psychologically, a quick walk may be what you need to rekindle your hunting senses.

There may be another advantage to a fast pace that has been too little explored. I've had deer stop and stare at me while I was marching through the woods, only to have them bolt when I slowed to a sneak. Do they suspect that only a hunter/predator would be stalking, but if I'm hiking, I must be up to something else?

An impatient hunter might want to sit an hour, walk 15 minutes, sit one, walk 15 again, or any satisfying combination. I often can renew my patience to wait for deer by moving a scant 50 yards, just so I'm looking at my surroundings from a different angle. Or perhaps you may want to reverse the usual sit long/walk short formula, by pausing briefly to sit on a log or lean against a tree and spend the largest part of your time still hunting.

Sometimes the patience problem isn't so much with yourself, but with the deer. The trouble is the long wait until they decide to get on their feet again. Another option for the impatient hunter is to be a drive organizer. Give the deer some reason to be up and about. Hook up with other impatient sorts and create your own action.

I have some hunting companions who

are always ready to get together for a day or an afternoon of driving. In other instances, a mere meeting with a stranger in the woods has resulted in an impromptu deer drive. You never know when you'll meet another gunner who isn't content to wait. Don't forget it's possible to push heavy cover yourself, then post along the edge, and see deer sneaking back past to reenter their haven.

Impatient hunters can optimize their hunting time. They can make certain they're out there when chances for success are greatest, at morning and evening. However, I've long recognized two other peak deer activity times during the first couple days of the season. These are around 10 o'clock, when many hunters get up and walk, and around 2 o'clock, when the hunters who have gone back to their cars for lunch are reentering the woods.

Another idea is to optimize your hunting spot. Go with the place that's your best bet, and be as patient there as you can. Preseason scouting is important to the impatient hunter. But don't overlook following up hot in-season tips, going where a good buck is still being seen. How many times have you seen antlered deer in your headlights on the way home? But how many times have you hunted that crossing the next morning? There's an excellent chance that rack has stayed nearby.

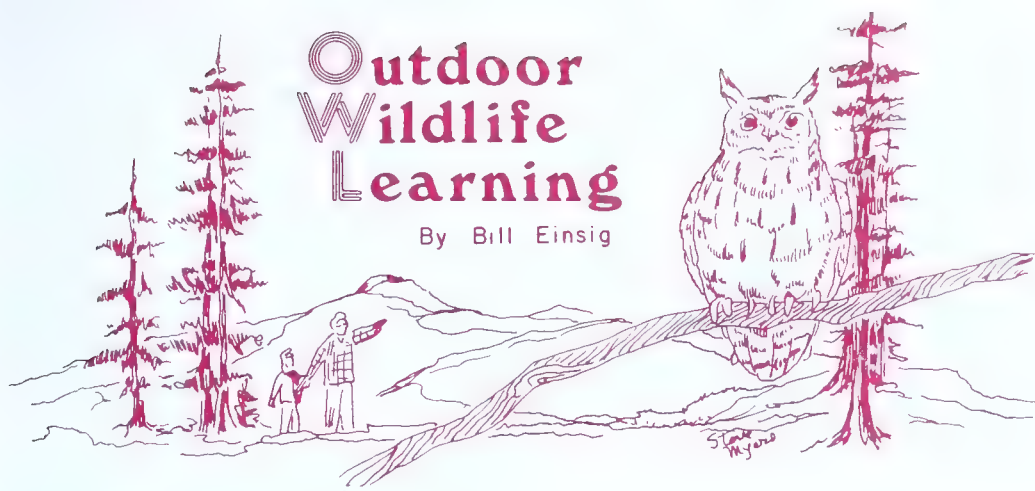
Being an impatient hunter isn't necessarily bad. Granted, a hunter with an infinity of patience, the kind that can settle in on a stand for the day, the week, the season, has time and the regularity of deer habits on his side. But those who don't find a long siege to be their idea of a satisfying hunt still have options that can get them game.

The last suggestion I'll give you is one of degrees. Go hunting with someone who is "antsy-er" than you. He'll be up and putting on an unconscious drive, while you'll still be on stand, with a little patience to spare.



# Outdoor Wildlife Learning

By Bill Einsig



## A Permanent Lawn Transect

**S**CHOOL LAWNS are rarely considered natural study areas, yet they represent a grassland community normally composed of several dozen grasses and broad-leaved herbaceous plants—usually called weeds. A host of small animals are normally found on lawns, too. Many are invertebrates such as ants, spiders, beetles and centipedes. Below the surface are grubs, moles, mice and a variety of worms.

The lawn community is controlled by the mower. Therefore, all species living there must adapt to a life zone limited to a height of only a few inches. Plants that can spread horizontally, or can withstand the repeated loss of a major portion of their food-producing leaves, can be successful in a mowed environment. Such mowing may make the lawn seem less desirable as a “natural” study area but, in fact, the lawn beautifully illustrates adaptation and survival of organisms suited to harsh conditions.

One of the best ways to study the lawn habitat is to use a series of transects to learn what plants comprise this type of environment. If placed randomly throughout the study area, transects can yield accurate estimates of the density, frequency and coverage for each plant species.

In its broadest sense, a transect is a straight line of some specific length passing through the study area. Species that touch the line are identified, counted and measured, and serve as a sample of the whole community.

The following activity describes one

method for establishing a type of transect known as a line intercept to estimate coverage by various species. It is intended to be used on the school lawn with high school life science classes to illustrate one method plant ecologists might use to collect scientific information on a plant community.

### Set Up:

1. Choose a section of lawn that can be adequately sampled by about six randomly placed transects each ten meters long. An area about the size of two classrooms—approximately 2000 square feet—allows students to spread out comfortably but still be close enough for discussion and questions.

2. From a practical standpoint, the number of transects will be determined by the number of students in the class and the number of students in each transect team. I like teams of four students per transect, so I need about seven transects in our study area.

3. Transects are supposed to be located randomly throughout the study area, and there are a number of methods researchers use to ensure randomness. For teaching purposes, however, I have a more practical, time-saving method.

After you use some process to randomly space your transects, hammer a short (4-inch) dowel into the ground at each end. The dowel should be predrilled with a 1/8-inch hole to a depth of one inch and painted a bright color. Set these dowels flush with the ground surface so

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they become permanent markers of your transect end points.

Each time the transects are needed, simply insert #8 or #10 common nails in the holes, attach the connecting string and begin collecting data. The dowels can remain in the ground permanently and the bright color will help you locate them when you need to.

4. The ideal line forming the transect itself is a steel metric tape.

The transect can be subdivided into intervals easily and the coverage of each plant can be measured directly from the metric scale. Most teachers don't have this many tapes so they use string marked off in one meter intervals.

Tie one end of mason's twine—which is designed to form a consistently tight line—into a loop and attach it to the nail at one end of the transect. Stretch the twine to the other end point and draw it taut before forming the second loop.

Now, using a meter stick or a steel tape, mark off ten one-meter intervals on the string. When finished, the string can be removed, stored and replaced week after week, year after year. With this system of permanently placed end points, students save at least a double lab period in set up time.

### Data Collection:

Student teams are assigned to individ-

ual transects where they move along each one meter interval, measuring the distance each plant intercepts (covers) the actual line (intercept length). In a mowed lawn individual grass plants are difficult to identify and count, so I ignore counts of individuals and concentrate on intercept lengths. This also simplifies the activity.

If two plants overlap and cover the same part of the line, measure them both. The total of all intercept lengths will, therefore, probably be greater than the length of the transect. Also, measure the intercept length of any bare ground the line passes over.

A data sheet for a single one-meter interval might look like this:

#### *Transect B, Interval 1*

Start, 0 cm	
Grass	6 cm
Dandelion	8
Grass	3
White clover	10
Dandelion	3
Grass	20
White clover	30
Bare ground	4
Grass	8
Dandelion	8
End, 100 cm	

### Calculations:

1. Add all the intercept lengths for each interval and then for the entire transect. Teams can then pool data for all transects in the study area. For our example, the total intercept lengths would be:

White clover	40 cm
Grass	37
Dandelion	19
Bare ground	4

Total intercept length      100 cm

2. Find relative coverage for each species by dividing the total intercept length for that species by the total intercept length for all species. For grass in our example:

$$\frac{37 \text{ cm}}{100 \text{ cm}} = .37 \text{ relative coverage}$$

To express this as a percent, simply multiply by 100 (e.g., 37 percent).



## Other Calculations:

Density and frequency are two other measures calculated from the line intercept data. Relative density is the number of individuals of one species divided by the number of individuals of all species. Density is troublesome in a mowed grass community because it is based on the number of individuals of each plant species, and individual grass plants are difficult to count.

Relative frequency is easier. It is determined by dividing the number of transect intervals in which a species occurs by the total number of transect intervals. If a class of students works with seven transects, with ten intervals each, and if dandelion occurs in 35 of these intervals, the relative frequency is .50, or 50 percent.

## Problems:

Use the line intercept technique to answer problems such as the following:

1. How does relative coverage vary from year to year? Is there a trend taking place as weedy species compete with grass for growing space?
2. Does the coverage in this lawn vary from October to May?
3. Do coverage estimates vary if data are collected just before and after mowing?
4. Will the coverage estimates for a fertilized study area differ from a similar, but unfertilized, area?
5. Lay out a line intercept along some gradient, such as along a dry slope to a moist bottom of a grassy waterway. Plot the distribution of plant species along this gradient. What factors could account for their distribution?



## References:

Laboratory manuals written for general college-level ecology courses are valuable references for high school teachers. They are usually less technical than standard, formal references and contain suggested activities in some format ready to use or to modify to fit student abilities.

Two manuals I've found very helpful are *Field and Laboratory Methods for General Ecology*, by James E. Brower and Jerrold H. Zar, and *Laboratory Manual of General Ecology*, by George W. Cox. Both are published by Wm C. Brown Company, Dubuque, Iowa. Consult your librarian for current prices and ordering information.

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**By Jack Weaver**  
Wildlife Conservation Officer  
Centre County

**T**HE MAN contacted me in the evening after the first day of bear season in 1987. He told of several large feeders, filled with corn, located in a large stand of laurel on private property. Nearly every feeder, he said, had a tree stand overlooking it. He went on to point out that the owners of this land don't hunt bear there, but that they would be up to hunt deer. WCO John Wasserman also called that evening to tell me of an unusually high bear kill on one particular ridge in my district.

He had been working at the bear check station near Renovo and noticed the high bear kill on the large topographic map used to plot bear kills. John suspected bait in that area might have caused bears to congregate there. I had also received reports of some bear baiting in another area in my district.

The next morning I contacted Law Enforcement Supervisor Zeidler and asked for air surveillance. Arrangements were made for an airplane to fly into the Black Moshannon airport and pick me up that afternoon. But, like many things attempted on the spur of the moment, and on one of the busiest days of the year, the message got lost. So it was that the flight was approved, but nobody told the pilot, WCO Dave Koppenhaver. Dave called me that evening to apologize for the mix up.

Dave is the pilot of the airplane the Game Commission shares with several other agencies. He said, weather permitting, he would pick me up at Midstate Airport about noon the next day.

The weather was a bit choppy the next day, and the plane seemed to be bouncing along on a light jog. I hadn't noticed, being especially intent on searching for bait and keeping track of where we were. Everything looks so different from the air, sort of like it's all upside down. Then Dave casually asked if I was feeling okay. "Sure," I replied. "Why?"

I never should have asked. Dave pointed out the storm that was causing the turbulence and then showed me where the motion sickness bags were stored. I promptly informed him that I had served on a destroyer and was used to rough seas and that I had never been seasick. Dave just smiled and said that if I did get sick, not to forget to move the microphone first. Because of engine noise we had to wear head sets and talk through microphones which hung right in front of us, practically brushing against our lips. I wondered who last got sick on the mike and my stomach sort of lurched. Then I began noticing the bumps.

We didn't find any bait over the ridge John Wasserman wanted us to check, so we headed for the other area where bear bait had been reported. The bumps, it seemed, were getting worse. Dave looked over concerned and suggested I open an air vent. I insisted I was fine. (Sailors are proud!) Bouncing around over this second area we found nothing there, either. By then I was fondly missing old terra firma, but I swallowed hard and tried not to show any weakness. I wasn't fooling Dave, but I hoped I was fooling my stomach. Dave was smiling again when he asked if I wanted to look anywhere else. I remembered the man's story about the feeders and thought this would be a good opportunity to pin point their location before I attempted to reconnoiter the area on foot. Secretly plotting to keep my feet on solid ground in the future, I reluctantly pointed in the direction of the feeders.

We bounced over toward Snow Shoe, with occasional down drafts splattering my stomach against my diaphragm. We had no trouble finding the camp, nestled beside a little stream. An ATV trail ran from the camp and led up a hill to an eight or ten acre laurel patch on top. The trail led right through the middle of the patch



and to several tree stands surrounding the back edge and sides of it. Next to several of these stands were some large feeders, complete with a thick carpet of corn cobs littering the forest floor all around. We also spotted several white salt blocks by some of the stands. Almost in the middle of the laurel stand, however, was one very large bin type feeder overflowing with shelled corn. From the air it looked like a pirate's treasure chest spilling gold out over the ground.

After we circled higher, so I could get a better view and orient everything with the map, we bounced back to the airport. When I stepped shakely down onto mother earth, Dave commented that I looked rather green. "Ya," I countered. "But I didn't get sick!" It was also several days before I ate anything, too.

The predawn darkness the following Monday—the opening day of buck season—found me leading a strike force of four deputies into the thick laurel. I had already scouted the area thoroughly, so had plenty of time to show each man the feeder he was to watch. Then we took up our positions and waited. Before it was fully light a four-wheeler came up the trail and stopped to let someone off at a stand before going on. As the sky began to brighten, blaze orange could be seen sprouting in the woods before us. In effect, the hunters had the heavily baited laurel patch surrounded.

When our roundup ended we had corralled seven hunters who were hunting over bait.

For the next hour I sat in their camp, drinking their coffee and taking their money. A growing pile of the green stuff was spread on the table in front of me as each man filed in the room to pay his bill. Suddenly, there was a flash, and when I looked up one of the men was standing there with a camera, smiling. "I just want to show my wife I don't always lose this money playing poker," he explained. Despite the fact that these men were apprehended committing a serious violation and shelled out a total of \$1900 cash in fines, they all behaved like gentlemen. The next crew we tangled with, though, were anything but gentlemen.

Deputy Bob Norbeck had received information that led us to believe illegal activity had occurred on a large tract of private property near Pine Glen. Conservation officers, by the way, are authorized to enter private property, even if it's

posted, in the performance of their duties. In this case, the owners and their guests had a history of wildlife code violations. And, they never liked to see us on the grounds. Generally there is a hassle of some kind and this day was no exception. In the end, two hunters on this property were convicted of refusing to produce identification and interference with officers in the performance of their duty. It cost them \$800 apiece and they suffered the loss of their hunting privileges for two years. It never pays to resist enforcement officers who are trying to do their duty. When we finished with the case here we were back to checking licenses and deer, and trying to curb the seemingly increasing instances of road hunting. But, on the third day of the season, we unveiled a new weapon to help us curb this problem.

We call it a wildlife facsimile. Others call it a decoy. Some consider it entrapment, thinking that the use of decoys is unfair. Such rationale is rather humorous. How about being fair to wildlife? Hunting, after all, is a sport of fair chase. Cruising miles of back woods roads and trails in a four-wheel drive and shooting wildlife from a vehicle certainly isn't fair. Neither is lying like fools when accosted by an officer investigating such offenses. As for entrapment? The courts, who are the final referees in such situations, have ruled that the use of wildlife decoys by conservation officers is not entrapment.

The first decoy we used was a makeshift archery target in the form of a small buck, but it wasn't convincing when examined under the close scrutiny of telescopic sights.

Deputy Plummer Davidson was my partner on that first Wednesday morning of buck season. The artificial deer was draped over the back seat of my state patrol vehicle as we turned down the De-Hass Road on Sproul State Forest. Not far down the road we encountered a vehicle coming toward us. It wasn't completely daylight yet, and we were still using our headlights. For that reason the driver of the oncoming Jeep had no idea he was approaching a Game Commission vehicle. He was driving slower than normal, which looked suspicious to me. As we drew closer on the narrow dirt road he pulled over to give me room to pass. That was a bad mistake for him. Instead of passing I stopped and got out to check him. Sure enough, his rifle was fully loaded. As I had suspected he had

already begun road hunting. While the violator was standing beside my window, waiting for me to complete his citation, I noticed he kept glancing at the decoy in the backseat.

After we finished the paperwork we went on, and placed the decoy at the edge of a small clearing about 75 yards from the road. Plummer, armed with a portable radio, took up an observation post nearby while I hid the marked state vehicle farther down the road. Several vehicles passed by, and eventually, Plummer called to tell me no one was buying our decoy.

When I picked Plummer and the decoy up, he told me the first vehicle to stop was the man we had cited earlier that morning. He said the man came cruising slowly down the road after I pulled away. When he spotted the decoy he slammed on his brakes and jumped out of his Jeep with rifle in hand. Plummer said he didn't have it loaded though, because he watched him jam in the clip and work a live round into the chamber. Then he leaned against the open door and sighted on the decoy. Plummer waited tensely for the shot to fall, but the man lowered his rifle and looked questioningly at the deer. Then he walked closer, leaving his vehicle running in the middle of the road. Next he leaned against a tree along side the road and once more took aim at the "buck" standing at the edge of the clearing. Again Plummer waited for the shot, and again the man put down his rifle and slowly stalked closer.

Now, half way to the decoy, he again took aim. Then he put the gun down and looked hard at the deer. Suddenly he was looking wildly in all directions, then he turned and sprinted for his car. Plummer said he threw the rifle inside, jumped in and took off in a cloud of dust down the road! I asked Plummer why he didn't call me on the radio to stop him. Apparently, he never unloaded the gun. "Oh, no!" Plummer said, laughing. "He never unloaded it, but I was laughing too hard to use the radio."

We tried that decoy in a couple of other places that day but the deputies watched in frustration as a parade of vehicles rolled slowly by, windows down, men clutching rifles. They watched as car after car of road hunters stopped, scoped the decoy

and then drove on. There was no doubt in our minds that if we had had a more lifelike decoy we would have been busy. In the end, we made up our own.

We took a large block of styrofoam and cut it in the shape of a deer's body. Over this we draped a deer hide and attached an old mounted deer head. During buck season we had time to use it only once during the second week, but it worked fine. Because of other problems that needed tending, though, we didn't get to try it again until late in the afternoon of the last day of the antlerless season.

We set up on an old road that runs along state game lands near the town of Clarence. The decoy was placed in some thick brush, in a bedded down position, about 40 yards from the road. We didn't want it to be readily seen, except by those actually road hunting. We were careful, as always, to be sure there was an adequate backstop behind the decoy.

We didn't wait long. I watched a red pickup cruise slowly by towards the decoy. Shortly, I heard a lone shot, and Deputy Dave Ivicic called to report a man had just slammed on his brakes, jumped out, and fired one shot at the deer. It wasn't long before the man was sitting with me in the state's Bronco, while I processed the necessary paperwork. We both listened to Dave give a blow by blow description over the radio of the next incident. This man also jammed on his brakes and jumped out with his rifle, but he didn't shoot. He would pull up and sight on the decoy, then stalk closer and pull up again. Then he started cursing and marched over to the deer. He said later that he thought someone had put a frozen deer out for a joke. When he walked up to the deer he drew back and gave it a hard drop kick. He was expecting to contact a solid body, but watched in dismay as the styrofoam carcass sailed high in the air and the head rolled off on the ground. Later, angry at us for such unfair tactics, he exclaimed, "You don't think anyone from around here is dumb enough to shoot at something like that do you?" I didn't have the heart to tell him we had just arrested his brother for doing just that.

Well, have a safe and enjoyable deer season. And please, be careful on the roads.



# Thornapples



Chuck Fergus

ON A TRAIL in Cameron County, I once came upon a curious track. The two lines of footmarks were spread about eight inches apart. The marks themselves were smallish and inward-turning, and between and behind them were faint zigzag traces, as if someone had applied a whisk broom to the dust. The spoor looked fresh, and within 30 yards I overtook its maker, a large black rodent waddling along the path—a porcupine.

He had heard my footfalls. In typical porcupine fashion he edged to one side, hid his head in a clump of mountain laurel, and pointed his tail in my direction. His tail bristled and his back arched, exposing a phalanx of white, needle-tipped quills.

I could not resist goading him a little, and thumped the ground with my staff. He swung his tail at the staff, missing, but dislodging and scattering a few quills. Burying his head even deeper in the laurel, he waited for me to desist and be gone.

Having nothing better to do—and wondering about those whisk-broom marks—I went down the trail a few yards and sat on a stump. After a minute or so the porcupine extracted himself from the laurel and resumed his journey. He came trundling along, muttering in a low tone, swinging his heavy stiff tail back and forth: long wiry hairs on the tail's underside swept the zigzags in the dust.

I did a double take. This porcupine was blind. Where eyes should have been there were only sockets. Lips and cheeks were gone as well—they hung in tatters on either side of the bright-orange rodent teeth. The porcupine stopped and swung his head back and forth, winding me; he stumped off the trail. He did not assume a defensive posture but kept on lumbering through the woods, now and then bumping into a log or a blueberry bush.

Bad luck. Blind like that, he'd surely starve. What had lit into him? A bobcat? A coyote? I thought for a moment of dispatching him, putting him out of his misery. I even got up and took a few steps in his direction.

The porcupine had stopped at the base of a maple tree. Now he stood on his hind feet, reached up with one paw, and sunk his claws in the bark. He reached up his other paw and got a grip with it, too. Then, slowly, he hauled up both hind legs at once. In this fashion, clumsy but strong, he clambered up the trunk.

I let him go. If any animal could make it, eyeless in the wild, it would be this phlegmatic, armored, arboreal beast.

The porcupine is *Erethizon dorsatum*. "Erethizon" means irritable, and "dorsatum" means back, alluding to the back-cloaking armor of quills, raised when its owner feels threatened or is irritated.

The porcupine is very well armored. The animal may have up to 30,000 quills on its back, sides, neck, head, and tail. The quills are three to four inches long, extremely sharp, and loosely attached. Folk beliefs to the contrary, the porcupine cannot throw its quills; it lets its attacker impale itself on them, or it drives the quills home with a swat of the tail.

A porcupine quill is an amazing engine. It is a specialized hair, spindle-shaped and filled with a sort of foam, nature-designed to pierce the skin and muscles of other animals. Thousands of tiny barbs cover the needle-sharp tip, and as the quill-stuck creature moves about, the quill is drawn further inward, penetrating as much as an inch a day. A

predator foolish enough to tangle with a porcupine risks having a quill pierce its heart, liver, or lungs, a blood vessel or an optic nerve.

I am reminded of another porcupine encounter in northern Pennsylvania. My friend Carl Schwartz and I were backpacking along the Chuck Keiper trail. Carl had brought along his large and truculent English pointer, Burr. He and Burr wandered on ahead, and I heard a great roaring and a confused shouting, and hurried up to find Carl beside himself, Burr shaking his head in pain, and a porcupine, not much the worse for wear, waddling off into the shadows.



It was almost dark, and not a pleasant situation to be in. While Carl sat on Burr to keep him from snapping, which in his growing agony he rather wanted to do, I bound together the dog's hind legs and his forelegs, then secured his hind legs to one tree and his forelegs to another tree. Together Carl and I managed to immobilize Burr's jaws, by lashing in a stick at the back of his mouth.

Fortunately, Carl had brought along a

pair of pliers. We started with the quills on Burr's face—four or five dozen. With each yank, the dog groaned piteously and foamed at the mouth. We finished with his face (now swollen to almost twice its size), we readjusted the stick between his jaws, peered into his gullet, and almost gave up: there must have been another two hundred quills lining the dog's throat. Grimly we went back to work, Carl pulling while I held down Burr's head and pointed the flashlight, and in the end we had to leash the dog, hike out to the car, drive home, and get a veterinarian out of bed; he anaesthetized the dog and removed the remaining quills.

Thankfully, the porcupine is not an aggressive beast. He is described as "fretful" by William Shakespeare in *Hamlet*. Nessmuk, preeminent American sporting writer of an earlier day, employs the same adjective, adding, "If you happen on a healthy young specimen when you are needing meat . . . shoot him humanely in the head, and dress him. It is easily done; there are no quills on the belly, and the skin peels as freely as a rabbit's. Take him to camp, parboil him for thirty minutes, and roast or broil him to a rich brown over a bed of glowing coals. . . . You will find him very like spring lamb, only better."

The porcupine feeds exclusively on vegetation. This description of a porcupine is from a poem by Galway Kinnell: "Fatted on herbs, swollen on crab-apples, puffed up on bast and phloem, ballooned on willow flowers, poplar catkins, first leaf of aspen and larch."

Porcupines love shed deer antlers, and anything else with salt in it or on it: tool handles, boat gunwales, saddles, oars. Sometimes they eat automobile tires, radiator hoses, and sparkplug wires. They gnaw through cabin doors and chew chairs and tables down to nothing. Because of the damage they can do, and because I have a dog, I have eliminated one or two around the house. A blow on the snout does the trick.

Most of the porcupines I see, however, are safely in the deep woods. Last year in deer season I watched one for an



hour. He was perched in the crown of a chestnut oak, from whose branches he had removed several square feet of bark. (The ivory-white inner wood, shining against the gray outer bark, was what caught my eye.) This porcupine wasn't doing much of anything; just sitting there in the cold streaming wind. When I came back to the same crossing three days later, he was still in the same chilly spot. Sometimes a porcupine will feed for weeks in a single tree, called a "station tree." I once found a porcupine resting in a crude nest, made of clipped-off twigs, 30 feet up in a hemlock; tracks in the snow showed where deer and rabbits had fed on twigs that the porky had dropped.

Porcupines also shelter in rock crevices (note the great pile of reddish-brown cylindrical dung spilling out of the entrance), hollow logs, and old fox dens. They do not travel far. They spend most of their hours in trees, especially during fall and winter. One biologist determined that porcupines do most of their feeding within a radius of 430 feet, and their winter range is a scanty 13.3 acres.

Porcupines are solitary, except in the mating season, November and early December. They do a great deal of cater-

wauling at this time. I have never seen it, but the male is said to stand on his hind legs and urinate all over the female during the courtship; flattered, she lays down her quills, allowing him to mate.

### Porcupette

After a seven-month gestation, the single young is born—titled a "porcupette." The porcupette is fairly large, its eyes are open, and within an hour it can walk around. One summer I discovered a porcupette; this was a creature about the size of a cantaloupe. I noticed it as I stepped over it, and almost at the same time my spaniel Jenny stepped over it, and before I could say "No!" Jenny's nose had swerved around and promptly been swatted. Six quills, each about a half-inch long, and every bit as sharp as an adult's; I was able to pluck them with my fingers. The porcupette was a cute little creature, sleek and black. This was in June, so it couldn't have been more than a month old. Apparently it was already on its own: no sign of a mother anywhere around.

Porcupines are thought to have arisen 30 to 40 million years ago in South America, where several kinds live today. In North America, our single species is found throughout the West, across





much of Alaska and Canada, and in the Northeast south to West Virginia. Among North American rodents, the porcupine is second in size only to the beaver.

Rodents are not thought to be great mental wizards: squirrels, woodchucks, mice, voles—creatures of habit, scoring maybe 3 out of 10 on the mammalian smarts scale. Certainly the porcupine—ponderous, ungenteel, lacking even the

nimbleness of the squirrel, the industry of the beaver—is widely considered a dullard. Although, perhaps this assessment is unfair. According to the biologist Alfred Godin, in his excellent *Wild Mammals of New England*, porcupines are “amiable and make interesting pets. They rely greatly on hearing and smell, and much of their so-called stupid behavior stems from the fact that they are myopic.”

Which reminds me of the blind porcupine I met on the trail a few years back. I'm glad I didn't whomp him across the nose with my staff. That would have been terribly presumptuous. He probably survived. He probably still resides in his 13.3 acres of Cameron County woods, where, unconcerned with the loss of his feeble vision, he is now occupying the crown of a maple or a cherry, hunched against the wind, muttering to himself while phlegmatically chewing on phloem.

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## Books in Brief

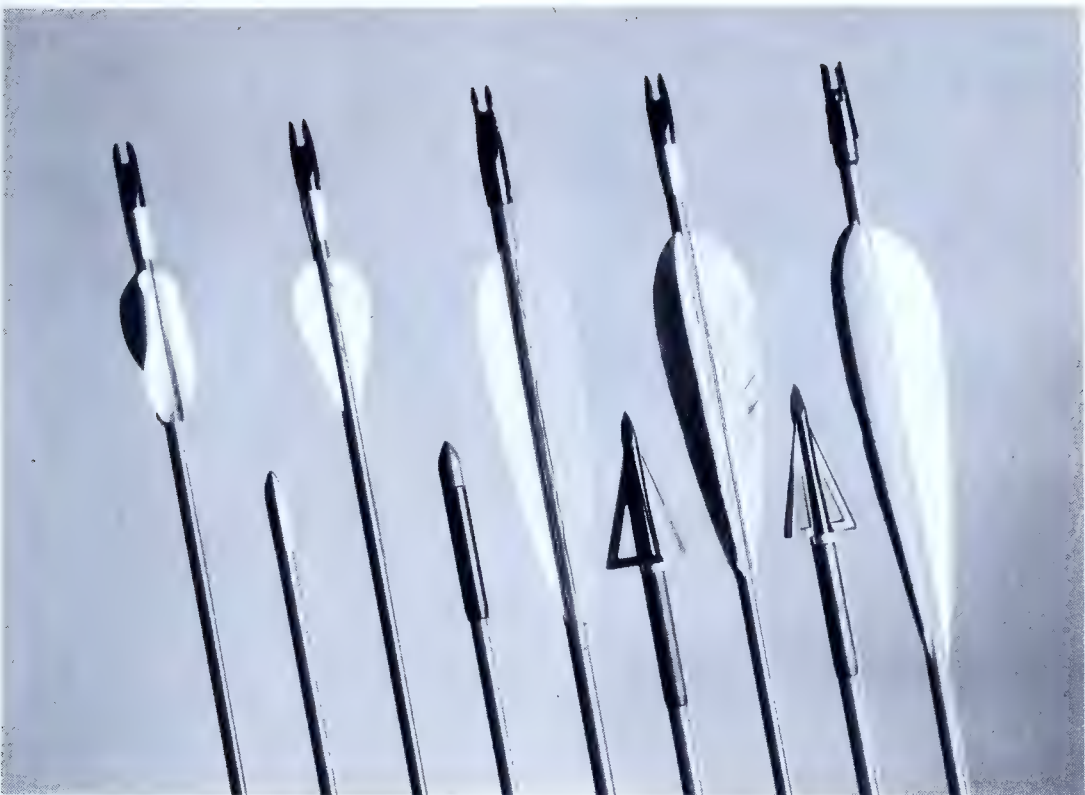
(Order from publisher, not from Game Commission)

**Mostly Huntin'**, by Bill Jordan, Everett Pub. Co., 813 Washington St., Bossier City, LA 71112, 245 pp., \$20.50. Jordan's only previous book, **No Second Place Winner**, is now in its eleventh printing, so you can be sure he's an informative and entertaining writer, as well as one of the true experts with firearms. **Mostly Huntin'** is a collection of his columns which have appeared in various gun magazines. They cover his experiences in Africa, Australia, Mexico and elsewhere, as well as North America. Well worth reading.

**Eastern Upland Shooting**, by Dr. Charles C. Norris, with a foreword by George Bird Evans, Countrysport Press, Box 1856, Traverse City, MI 49685, 408 pp., \$29.50. This is a new edition of the book first published in 1946 by Dr. Norris, an ardent sportsman who loved good dogs, good guns, and good bird hunting. It contains considerable information on dog training, an especially helpful chapter on the care of the dog, good suggestions on gun handling (by a man who did most of his shooting with a Purdey), and excellent chapters on the gamebirds of the eastern U.S. Furthermore, Dr. Norris gently makes clear that there is a “right” way of using dogs and guns—in not only the technical but also in the ethical sense. His attitude gives a nice tone to a book which has become a classic in its field.

**Field Dressing Big Game**, by James Churchill, Stackpole Books, Box 1831, Harrisburg, PA 17105, 88 pp., softbound, \$10.95. This illustrated guide provides clear directions for field dressing thirteen species of North American big game animals, including deer, bear, elk, moose and caribou. Also covered are caping, skinning and butchering, with information on preparing trophy heads for mounting, meat handling, and the equipment needed for such work. A useful book.





**CARBON ARROWS** are available in several varieties and they are characterized by having less weight and more speed and durability than aluminum, but at a price.

**Aluminum challenge . . .**

# The Carbon Arrow

**By Keith C. Schuyler**

**E**ACH TIME something new emerges into the realm of archery equipment there is the feeling that we have now reached as close to perfection as possible. A few months, or years, later, though, something new is presented, to be evaluated in practice before the buyers determine whether or not it is acceptable.

So it is with the new carbon arrow shafts produced by AFC, a division of MMFG at Chatfield, Minnesota. After hearing and reading about this new use for the material, I ended up with more questions than answers. Most seemed to be taking a cautious approach without digging into the subject to form a studied opinion.

After having shot with wood, fiberglass, steel and some other compounds, and aluminum, over the years, I thought that the aluminum produced by Easton offered the ultimate material for arrow shafts. So did a lot of state, national and world champions. Their fantastic scores seemed to support this choice.

Then along comes this combination of resins and graphite that is making claims that challenge the new/old aluminum shafts that have all but eliminated other substances for accuracy. According to AFC, the company claims to have NASA, the U.S. Air Force, General Dynamics, Boeing and a host of other manufacturers on its side to proclaim that carbon composites are twice as



**ED EVELAND**, an archery dealer from Asbury, demonstrating the capabilities of the Carbon Arrow, takes aim on a target set up 100 yards away.

centuries, solid wooden shafts were the choice of big game hunters and warriors.

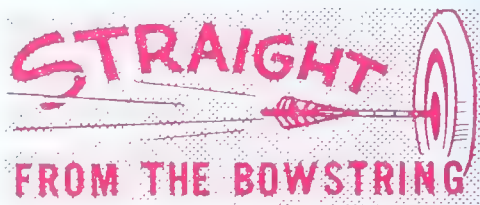
In the modern era of archery, little was known of any material other than wood. There were and still are attempts to improve on the bare shaft through various shapes and fittings of other wood to improve flight and durability, but mother nature didn't have the arrow in mind when she developed trees. In my early days of archery, it was necessary to number our arrows and remember the flight characteristics of each when shooting because of inherent imperfections in the wood of each arrow. In the early years we all used them. Because better materials are now available, I reject wood for big game hunting because of the cellulose content which can make a painful injury out of a superficial hit if the shaft splinters.

strong as steel, three times as stiff and half the weight of aluminum. What they do not tout is the fact that carbon composite arrow shafts are currently selling at roughly twice the price of not cheap aluminum.

### **Progression of Materials**

But something is happening. And a look back at the progression of materials for arrow shafts can bring us up to date. In its beginnings, it appears that archery began with solid wooden shafts. As an alternative, cane shafts from one plant or another were used because hollow material is strong but light. Maurice Thompson, in 1877, wrote in *The Witchery of Archery*, "A man can make for feathering two hundred of them in a day." He referred to "reeds", possibly bamboo shoots, that were fire hardened for straightness and to provide durability at one end for a nock and the other for a point. The shafts were used mostly for shooting birds and small game. In English yore, however, and through the

Although steel was tried, it proved unsatisfactory. It was not until the introduction of fiberglass arrow shafts in 1957, by Mort Barrus in California, that wood was seriously challenged. Manufacture entailed the use of aromatic, amine-hardened epoxies to fabricate close-tolerance, hi-density material. Robert Reid was hired by Barrus to make what was called Laminex. After Barrus' untimely death in 1958, Reid became manager of Browning Silaflex Rod and Micro-Flite Division to further develop the Laminex shaft. Reid had previously researched tubular fiberglass at Pacific Laminates Company, and he further improved the process. Ecco Products obtained Pacific Laminates, Silaflex and the Browning division in





**HIS FIRST** three shots were well grouped but off center. His second string, here, at a three-inch target, is impressive, but admittedly has little value for hunting.

1960, and Reid was named manager of Laminates, where he improved on the Micro-Flite shaft. Browning Arms Company acquired the Silaflex Company and bow production facilities of Gordon Plastics in 1962.

Those who shot the bow during that period can well remember the near displacement of wood by Micro-Flite. Fred Bear Archery acquired the name, Micro-Flite, and equipment from Browning. However, much of the equipment had seen its best days, and the line was dropped. Aluminum was in the forecast.

### Other Attempts

Other attempts were made to cash in on fiberglass, such as the spiral finish shaft by Shakespeare, Glas-Lite by Plas/Steel Products and a Durafiber that emerged briefly from the late '60s to the early '70s. Three names survived, Lamaglas, Gilmore and Gordon. Gordon came on strong with Graphlex XT, the last serious challenge to Easton aluminum for big game hunting, in 1984. The big advantage over aluminum is the perfect memory of fiberglass which will return a bent shaft to its original shape. Aluminum must be checked constantly for bends after rough use.

Actually, the first aluminum arrows were believed to have been made by Homer Bishop, Chicago, in 1915. Pure aluminum is too soft, and shafts took a bend just passing the bow. Duralumin was tried by Philip Rounseville in 1926, but need for this material in the early days of World War II halted his experiments.

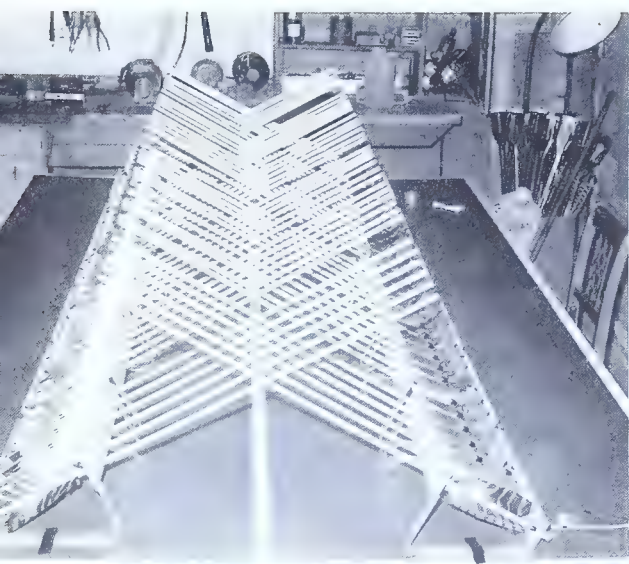
The late James Easton tried aluminum in 1941, and during the war he could obtain only enough material to continue his experiments. In 1946 he set up a plant to make shafts with machinery, and the rest is developing history. Whether it will become ancient history might well depend upon accep-



tance of the new AFC Carbon Arrows.

Strangely, perhaps, AFC sales coordinator Stan Feiseler compares the makeup of the new composite shafts to wood in that the wood shaft is fiber and liquid held together in a matrix. There the comparison stops. For the combination of graphite—a carbon and special resins—provides a composite that makes the strongest, lightest, smallest diameter hollow arrow shaft yet known. Speed of such shafts is increased by as much as 50 percent over comparable aluminum and is three times stiffer. This permits the use of much smaller diameters for lighter stronger arrows. If the center shot adaptation for bows had not been developed, the Carbon Arrow's resistance to bending would unlikely permit its use. As it is, the shaft's insistence on returning to its original conformation reduces the oscillation caused when string pressure tries to impart speed to the nock end of the arrow before the front is ready to go.

For an up front evaluation, Asbury archery dealer Ed Eveland, who is sold



**ECONOMICAL** wooden shafts, left, are still popular for beginning archers, and more sophisticated wooden and aluminum shafts will certainly remain popular for hunting, but the carbon fiber technology is developing quickly . . .

on the new shafts, did some shooting for my camera to demonstrate the capabilities of the Carbon Arrow. Using an 85-pound Jennings Unistar with a Speed Flex overdraw, Cobra sight, and a 2300 Carbon Arrow of 25 $\frac{5}{8}$ -inch shaft, headed by a 75-grain point, for a total of 430 grains, he gets 268 feet per second. With his bow at 95 pounds and using 2200 Carbons, for a total arrow weight of 357 grains, he can get 300 fps.

For our purpose, and using a light three-blade broadhead, he set up a target at 100 yards. His first three shots were well grouped, but off center. After a sight adjustment, his second round of three arrows is illustrated here.

Interestingly, Ed's sight pins are only  $\frac{5}{8}$ -inch apart from 20 to 60 yards;  $\frac{3}{8}$ -inch from 60 to 80 yards;  $\frac{9}{16}$ -inch from 80 to 100 yards.

Ed is the first to admit that all this speed and accuracy at known distances

has limited relationship to hunting conditions, but there is no denying that all factors involved are impressive. At normal hunting shots in Pennsylvania, up to 30 yards, even a much heavier carbon arrow would appear to have notable advantages for hunting.

Because the carbon arrows are so slender, a 1 $\frac{1}{2}$ -inch long,  $\frac{9}{32}$ -inch diameter point adapter of aluminum alloy provides concentric strength for the business end of the Stealth hunting shaft, top of the line. It will accept any AMO target or broadhead points. This enlarged section actually makes pulling an arrow from a target much easier. Three other models, the Super Shaft, Exacta and Ovation, are available.

There are considerations. Smaller nocks are installed, although an adapter will accept standard nocks, some bow quivers may not grip the thinner shafts, arrow rests may need modification or replacement.

This is necessarily a brief look at the new arrows which seem to have no serious drawbacks except one—cost. However, if accepted by archers in sufficient numbers, it is expected that the price will eventually match that of the better aluminums. AFC's parent company, MMFG, is second only to the U.S. government in the use of carbon fiber and "is also on the leading edge of technology with resins used for manufacturing."

Time will tell.

## First Roads Opened to Disabled Hunters

In a program that will be expanded in coming years, the Commission opened, for the first time, two game land roads to disabled persons who qualify, under agency regulations, to hunt from a vehicle. The roads include 7.6 miles on SGL 110 in Berks and Schuylkill Counties and 2.5 miles on SGL 117 in Washington County. The roads are open to disabled permittees from October 1 to January 15 (weather permitting). A permittee may be accompanied by one other licensed hunter.



# Bolt Action Rifles

By Don Lewis

Photos by Helen Lewis

**T**HE FIRST RIFLE was little more than a barrel connected to what could be called a pole. In the early 1300s wooden stocks were often referred to as "tillers." A dictionary definition of a tiller is "part of a steering system," and the wooden pole or tiller allowed a shooter to hold a rifle and more or less aim or steer it in the direction of the target.

Stock configurations, ignitions systems and rifle designs evolved with shooting techniques. Sometime around 1704, a French engineer named Isaac de la Chaumette produced a rifle that could be reloaded at the breech. It generated some interest and was improved by several other rifle builders. The Chaumette system was brought to its fullest development by a Scotsman, James Ferguson. By 1776 Ferguson had overcome many of the problems that had plagued Chaumette's early version, and when Ferguson fired six shots in one minute before a group of British officers, the death knell for the muzzle-loading rifle could be heard across the English moors. Production of front end loaders gradually ceased. It was the end of an era.

James Ferguson unquestionably contributed to the birth of the breech loading rifle, but his death at the Battle of Kings Mountain on October 7, 1780,



A BOLT ACTION rimfire, such as this 54S Anschütz topped with a T-6 Weaver silhouette, makes a fine outfit for Pennsylvania's squirrel woods.

came from an American rifle ball fired from a muzzleloader.

In later years the lever action rifle was developed and it held the spotlight, mainly due to the popularity of the Winchester Model 1866, which held 15 shells in its tubular magazine and one in the chamber. Still, from a military view, the lever action had its drawbacks. In the heat of battle it was difficult to operate a lever from the prone position. The Spencer lever action rifle was certainly popular during the Civil War. I have read where over 100,000 were purchased by the military, and state and private purchases could have added another 100,000. Yet, with all the lever's popularity, rifle designers around the world were toying with the bolt action.

Swiss designer Frederick Vetterli



produced a bolt action rifle around 1866 that had a tubular magazine, much like the Winchester lever action, and an Austrian, Ferdinand Fruehwirth came up with a similar design. During the late 1860s, Peter Paul Mauser of Oberndorf, Germany, produced a single-shot bolt action that ushered the bolt action into the shooting limelight.

Mauser followed Vetterli's design by placing the magazine tube under the barrel in his Model 1884. There were problems with the tubular magazines, however, that ran the gamut from weak springs to distorted bullets. James P. Lee, a fresh new United States citizen

**MAUSER ACTIONS**, including this Argentine Mauser, have been used for military and sporting purposes throughout the world since before the turn of the century. To this day the 98 Mauser action remains the bolt action by which all others are judged.

from Scotland, came up with the idea of placing a box magazine directly below the bolt. This design swept through the shooting fraternity like a prairie fire in a windstorm.

Lee's design was a step in the right direction, but Ferdinand Ritter von Mannlicher took it another step further when he produced the cartridge clip. Shells were fastened in the clip and could be loaded with one quick push into the box magazine. The bolt action rifle had come into its own.

Most bolt action fans today are familiar with the Mauser 98 action, which was the culmination of several Mauser designs. Stepping back to 1867, Peter Paul Mauser and his older brother Wilhelm tried unsuccessfully to sell their bolt action design to the German military. A Remington representative, Samuel Norris, joined in a partnership with the Mausers, and received a U.S. patent sometime around 1868. This action was called the Mauser-Norris and is reputed to be the first Mauser action to bear the Mauser name. The Mauser-Norris apparently failed to generate interest with the military or major firearm companies, but the gun designers hit paydirt with the Model 71, a revised version of the 1868. A later model known as the M71/84, along with the Model 71, were produced by the thousands, and many are still in existence today.

Paul Mauser kept improving his actions and his next significant offering was the Model 96 Swedish Mauser. Then, several years later, he introduced the Model 98 action, and it still stands as a testimony to Paul Mauser's insatiable desire for perfection.



**HELEN** dropped this woodchuck with a Ruger Model 77 22-250 bedded in a Six fiberglass stock by Jim Peightal, and topped with a Simmons 6-20x scope. Introduced in 1968, the Model 77 has proven to be a fine bolt action.



The M98 Mauser action is machined from a solid steel forging, and the recoil lug is an integral part of the receiver. The receiver ring (front of the action) is threaded with V-type 55-degree angle threads (American rifle makers normally use 60-degree V-type threads). When the barrel is threaded into the receiver ring, it butts against an internal ring that acts somewhat like a backstop and also surrounds the bolt head. The only cut in the ring is the extractor slot.

The bolt is also machined from a steel forging and has an integral bolt handle. Two opposed locking lugs are up front; the right one is solid while the left is slotted for the ejector to pass through. I might also point out that the M98 Mauser bolt has a third—"safety"—lug at the rear of the bolt handle which aligns with the right front locking lug. Ordinarily, it doesn't make contact with its support, but would if the front lugs failed.

Some hunters are confused over the term large ring and small ring Mauser actions. I'm often asked what the difference is. An action with a 1.410-inch diameter receiver ring (front of the action) is known as a "large ring Mauser." The large ring action is what most sporting rifles are built on. The small ring actions have a receiver ring diameter close to 1.300 inches.

While the two terms may be confusing, the actions are not hard to distinguish. On the small ring Mauser the left side of the receiver is straight, including the wall of the action. On large ring actions there is more metal on the wall, especially where the wall joins the receiver ring. It's readily apparent that the large ring actions are much stronger because they have more metal surrounding the sides of the barrel shank and the locking lug recess areas.



**WINCHESTER'S PRE-64 Model 70—shown here equipped with a Canjar trigger—took the shooting fraternity by storm when it was introduced in 1936 and it still enjoys a large following of admirers.**

I have no way of knowing how much stronger a large ring action is over a small ring action, but I do know the Germans used small ring actions for the 8mm military cartridge.

I realize that I have barely touched on the famous Model 98 Mauser. Also, because this particular action has been in production a very long time and by many different rifle manufacturers, it's understandable that not all 98 Mauser actions are exactly alike. For instance, different manufacturers used different thread pitches, which is a story in itself. The important point, though, is that the breech face of the barrel must butt tightly against the inside receiver collar while, at the same time, the shoulder on the barrel butts against the front of the receiver. Having the barrel contact the receiver in two places is one of the reasons for the M-98's strength and durability, but it takes the talent and equipment of a custom gunsmith to make this two-point fit. That is, having the breech end of the barrel firmly against the receiver collar and also having the shoulder on the barrel snug against the front of the receiver. There are several ways of doing this. Custom rifle builder Jim Peightal tells me that he cuts the threads to fit the action he is using, not the other way around.

Several million Mauser 98 actions had been produced by the end of World War I, and many more were produced around the world during the World War





REMINGTON-UNION Model 700 Mountain Rifle, which comes in both short and long action versions, is a relatively new but yet already popular offering in the 700 series of bolt actions.

II conflict. No one has an exact figure, but up to 100 million or more Mauser 98s have been built, and it's safe to say that Peter Paul Mauser's Model 98 action is the one that all other bolt actions are judged by. I'll take one or a dozen 98s for a gift any day of the week. That's how I feel about the Mauser 98.

### Model 54

There's no question that Winchester's Model 70, both pre-64 and later models, have a large following of admirers. However, before touching on the Model 70, let's take a quick glance at its predecessor, the Model 54.

Winchester produced their first bolt action high powered rifle, the Model 54, around 1925. I doubt if I'm getting off base by saying the 54 Model carried some features of the 98 Mauser and Springfield actions. The Model 54

lasted for about eleven years before being replaced with the Model 70. During its short life, Winchester ironed out most of the problems and the 54 had some outstanding features, such as large unslotted locking lugs, a super extractor and high quality steel throughout. Maybe the 54 should be called a transition action, as Winchester, it seems, more or less used it as a test model. In 1936 Winchester introduced their Model 70. It took the shooting fraternity by storm and was probably the most popular action of the time. In 1964 Winchester made certain changes to the Model 70, apparently to reduce manufacturing costs.

The new Model 70 action started with serial number 700,000, which made all actions bearing numbers below 700,000 pre-64 models. To this day the demand for pre-64 actions is unbelievable.

The "post-64" model has a shorter action that is not entirely machined, and it has a sliding extractor built into one locking lug and a plunger-type ejector. On top of that, both locking lugs are flush with the end of the bolt. The bolt is a three-piece affair brazed together. Those changes caused avid Winchester fans to howl in anguish.

Their cries were eventually heard by Winchester, and around 1968, some significant improvements were made. One was the anti-bind device that aids smoothness as the bolt is worked back and forth. Another change that pleased Winchester fans was using steel for the



MILT ANDERSON, Greenock, has a super squirrel outfit in the discontinued Remington Model 521 bolt action rimfire topped with a 6x Unertl one-inch target scope.



floorplate instead of an alloy, which is really a mixture of metals and not normally as strong as pure steel.

Personally, I have never cared for the Winchester trigger. It is strong and dependable, but I prefer a trigger that can be easily adjusted for weight of pull, over travel, and creep or forward play without getting into a major overhaul job. With diligence and extreme care, these can be done on the Model 70's trigger, but, because the action and barrel must be removed from the stock, it's normally a job for a qualified gunsmith.

The demand for pre-64 Winchesters will undoubtedly remain high, but the new Model 70s are by no means bad. Some of the changes were improvements over the older models, and the new version is durable and dependable.

I don't want to heap too many accolades on Remington but, starting with the introduction of their Model 721/722 actions in 1948, Remington has produced the strongest mass-produced actions available. It's worth noting that both the 721 and 722 actions are exactly alike except for length. The receiver is machined from high quality round bar-

stock steel. Remington's 725 action was nothing more than a fancier version of the 721/722 actions. If I recall correctly, it's main feature was a hinged floorplate.

Remington is now going with the Model 700 action, which is similar to the old 721/722 actions. Even Remington's 600, 660 and XP-100 actions are based on the 722 action.

### Three-Screw Adjustment

I have heard remarks that the Remington trigger is nothing more than a pressed metal affair. While it does to some extent fit that description, it's 3-screw adjustment setup for trigger take up (creep), weight of pull and over-travel, which stops the rearward movement of the trigger instantly after the sear has been released, makes it a very efficient trigger. During my years of gunsmithing, I adjusted dozens of Remington triggers for weight of pull and over-travel. There's no need to stone, strop, file, or nip coils from springs with this setup. Having the screws adjusted by a gunsmith is the answer. It's the best mass produced trigger I've come across in all my years in this business.

## GAMEcooking Tips

### Cooking Venison Steaks to Perfection

Because venison is not marbled with fat and cooks completely differently, cooking to everyone's specifications requires a different procedure than cooking beef. I have learned to test venison for doneness by "feeling." After turning the steaks, begin to push on the surface every few seconds. You will be able to feel the flesh firming up as it cooks. With just a little practice, it's possible to catch your venison at just the exact doneness preferred.

#### Paul Jukes' Venison Steaks

1 whole venison loin  
barbecue sauce  
salt and pepper to taste

Cut steaks about one inch thick. Get the charcoal smoking hot and sear the steaks on both sides to seal in the juices. Lower the heat and cook for five minutes then turn. Grill another minute or two for medium rare, a little longer for medium well done steaks. Brush steaks with barbecue sauce during the last few minutes of cooking time. Salt and pepper to taste and serve immediately.

—FROM WILD GAME COOKERY,  
REVISED AND EXPANDED EDITION  
BY CAROL VANCE WARY

# In the wind

bob mitchell



The recreational shooting sports attracted a million new participants last year. As reported by the National Shooting Sports Foundation, the number of trap and skeet shooters climbed to almost five million in 1988, an increase of 11.1 percent over the previous year's figure. Target shooting with a rifle or handgun jumped 4.8 percent, reaching a new high of 16,549,000 shooters. The number of women taking up the shooting sports is a major factor for these increases.

Last April the Kansas legislature made it a felony to possess illegally killed wildlife valued at more than \$500. They also established legal values for many species, based on rarity and demand on the black market. Eagles, buffalo and elk, for example, are valued at \$500 each; deer, \$200; owls, hawks and falcons, \$125; and wild turkeys, \$75. For violating this new law, an individual would face up to five years in state prison, \$5000 in fines, and the loss of hunting and fishing privileges for ten years.

After pleading guilty to two felony counts involving the sale of eagles and eagle parts, a former county sheriff from Colorado was sentenced to eight months in federal prison, and ordered to pay \$410 in restitution and \$100 to the federal crime victim fund, and serve 50 hours of community service. The arrest resulted from an undercover poaching investigation in northern New Mexico and southern Colorado in which 57 individuals were arrested. Cases on the others are still pending.

**In winter, wildlife  
use pines for  
PROTECTION**





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By Betsy Maugans

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 Conserving Waterfowl—Howard L.  
 McKean . . . . . AUG  
 "Experienced" Hunter's View—  
 George E. Dvorchak, Jr. . . . . AUG

## COOKING

GAMEcooking Tips—  
 Carol Vance Wary . . . . . ALL MONTHS

## DOGS

Singer—Joe White . . . . . AUG

## FUN GAMES

Fun Games—Connie Mertz . . . . . ALL MONTHS

## GUNS AND FIREARMS SAFETY

Adios Recoil—Don Lewis . . . . . JAN  
 The Tale of the Twist—Don Lewis . . . . . FEB  
 Shotgun History—Don Lewis . . . . . MAR  
 Chronographs—Don Lewis . . . . . APR  
 The Forgotten Varmint Cartridge—Don  
 Lewis . . . . . MAY  
 The Hunter's Optics—Don Lewis . . . . . JUN  
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 Handgun Reloading—Don Lewis . . . . . SEP  
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 The Best Deer Rifle Action—Don Lewis . . . . . NOV  
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## HUNTING

New Year's Doe—William R. McClintic . . . . . JAN  
 Compromising With Time—George L.  
 Harting . . . . . FEB  
 The Allegheny Jinx—Mark Cerulli . . . . . FEB  
 Hard Luck Day—Daniel Jenkins . . . . . FEB  
 Last-Minute Luck Buck—Don Feigert . . . . . FEB  
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 Thanks, Buddy—Clarence W. Bundy . . . . . MAR  
 Three for Three—Gregory D. Levengood . . . . . MAR  
 Mystery of Shade Mountain Big  
 Foot—Donald L. Guyer . . . . . MAR  
 Just Us Girls—Carol L. Sipos . . . . . APR  
 Stump Hunting—Robert C. Gaffron . . . . . APR  
 Marvelous Morning in May—Copley H.  
 Smoak . . . . . MAY  
 A Grouse Earned—Nancy Marie Brown . . . . . MAY  
 A Bon Voyage Gobbler—Dan Watson . . . . . MAY  
 Pennsylvania's Greatest Bear Hunter—  
 John Tomikel . . . . . JUN  
 Chuck Hunting with Don Lewis—  
 Carl W. McCardell . . . . . JUN  
 Farm Country Whitetails—  
 Mike Raykovicz . . . . . JUL  
 The Four-Dollar Fox—Bob Latimer . . . . . JUL  
 A Learning Experience—Ruth Schmit . . . . . JUL  
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 First Season Memories—Dave Cooper . . . . . AUG  
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 Twelve O'clock High—Charles L.  
 Kane, Sr. . . . . SEP  
 The Single—Robert R. Bowers . . . . . SEP  
 Four Deer In 1988—Legally!—Carl W.  
 McCardell . . . . . SEP

Goose Magic—Howard Whiteman . . . . .	SEP
A Special Evening After Work— Richard Tate . . . . .	OCT
An Unsuccessful Archery Hunter— Carl W. McCardell . . . . .	OCT
Birthday Grouse—Paul A. Matthews . . . . .	OCT
My King of the Mountain—Jennifer Gutshall . . . . .	OCT
Being Different Works—Marion Younkin . . . . .	NOV
The Last Three Days—Nick Sisley . . . . .	NOV
A Dream Comes True—George L. Harting . . . . .	NOV
Big Bears for Both Brothers—PJ Bell . . . . .	NOV
A Real Turkey Hunt—Thad Bukowski . . . . .	NOV
The Ducky Deer Hunt—L. W. Loveland . . . . .	DEC
Welcome to Pennsylvania—Timothy Wolfe . . . . .	DEC
The Gun—Sam Rob . . . . .	DEC
Doe Season—H. T. Montgomery II . . . . .	DEC
Black Rifle White Deer—Robert C. Gaffron . . . . .	DEC
A Choice of Seasons—Tom Prusaczyk . . . . .	DEC

### LOOKING BACKWARDS

Looking Backwards— Jack Weaver . . . . .	ALL MONTHS
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### MISCELLANEOUS

Wildlife's Winter Days—Connie Mertz . . . . .	FEB
Sassafras—Jim Hayes . . . . .	FEB
Spring's Calendar of Sounds—Bill Rozday . . . . .	APR
The Old Rifle—Al Shimmel . . . . .	APR
Long Shot Summer—Bob Clark . . . . .	APR
In Praise of Serviceberries—Joseph B.C. White . . . . .	APR
Ringin' Out the Old—Joel M. Vance . . . . .	APR
New Light on an Old Problem—Wendy Plowman . . . . .	MAY
The Big Picture—Vern Achenbach . . . . .	MAY
Considering the Rain—Michael L. Morgart . . . . .	JUN
Ducks of the Corps—Jeff Knapp . . . . .	JUL
Weeds for Wildlife—Larry M. Iampietro . . . . .	JUL
The Best Week—Diana S. Berger . . . . .	JUL
The Deer the Elk Watched Over—Robert J. Traveny . . . . .	JUL
Compact Cameras—George L. Harting . . . . .	JUL
Friendship—Harold B. Birch . . . . .	AUG
Ikes Converge on Harrisburg—Wendy Plowman . . . . .	NOV

### NATURAL HISTORY

The Private Lives of Gray Squirrel— Marcia Bonta . . . . .	JAN
The Celestial Hunter—Eugene R. Slatick . . . . .	JAN
Slatick . . . . .	JAN
Mama Weasel—Bill Frazier . . . . .	MAR
Return of the Bears—Marcia Bonta . . . . .	MAR
A Memory of Bees—Carsten Ahrens . . . . .	JUN
The Yellow Birch—Karl J. Power . . . . .	AUG

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Bottomless Pits of the Poconos— Robert D. Buss . . . . .	MAY
Closing the Barrens to Grouse Hunting—Bill Palmer . . . . .	OCT
What's Up at the Game Farms— Carl Riegner . . . . .	OCT

### RESEARCH

1987 Game-Take Survey—William K. Shope . . . . .	FEB
Rabies—Still Spreading—Larry M. Iampietro . . . . .	MAY
Lyme Disease—Margaret Clark Brittingham . . . . .	JUN
The Eastern Coyote Revisited— Arnold H. Hayden . . . . .	DEC

### THORNAPPLES

Thornapples—Chuck Fergus . . . . .	ALL MONTHS
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### TRAPPING

Following Another Trapper's Footsteps—Joe Kosack . . . . .	MAR
A Season to Remember—Thomas J. Edgington . . . . .	JUN
What Do You Expect?—Joe Kosack . . . . .	JUN
Focusing on Fox—Joe Kosack . . . . .	AUG
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